

# Distributed Message Service for RocketMQ

## API Reference

|       |            |
|-------|------------|
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# 1 Before You Start

---

Welcome to *Distributed Message Service for RocketMQ API Reference*. Distributed Message Service (DMS) for RocketMQ is message-oriented middleware that delivers low latency, high flexibility, high throughput, dynamic expansion, easy management, and abundant messaging functions.

This document describes functions, syntax, parameters, and examples of the application programming interfaces (APIs) of DMS for RocketMQ.

---

## NOTICE

DMS for RocketMQ is continuously upgraded with new functions, and the existing APIs are inevitably adjusted. For example, new response parameters may be added.

To reduce the impact of API changes, DMS for RocketMQ is backward compatible with existing APIs. When using DMS, you should accept and ignore unused parameters and parameter values in JSON responses.

---

DMS for RocketMQ supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [Calling APIs](#).

## Endpoints

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

## Constraints

- The number of instances that you can create is determined by your quota. For details, see [Service Quota](#).
- For more constraints, see API description.

## Concepts

- Account  
An account is created upon successful registration and 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.

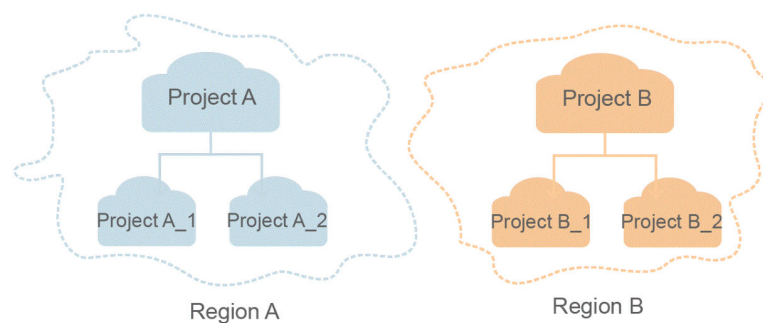
- IAM user

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

The account name, username, and password will be required for API authentication.

- Region: A region is a geographic area in which cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other. Deploying cloud resources in different regions can better suit certain user requirements or comply with local laws or regulations.
- An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.
- Project  
Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

**Figure 1-1** Project isolating model



- Enterprise project

Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated from each other. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

For details about enterprise project features and how to obtain enterprise project IDs, see the [Enterprise Management User Guide](#).

# 2 API Overview

Table 2-1 APIs for managing instances

| API                       | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lifecycle Management      | Includes <ul style="list-style-type: none"><li>• Querying the Instance List</li><li>• Creating an Instance</li><li>• Querying an Instance</li><li>• Deleting an Instance</li><li>• Modifying Instance Information</li><li>• Batch Deleting Instances</li><li>• Querying the Broker List</li><li>• Enabling Domain Name Access to a RocketMQ Instance</li></ul>                                                                                               |
| Consumer Group Management | Includes: <ul style="list-style-type: none"><li>• Querying the Consumer Group List</li><li>• Creating a Consumer Group or Batch Deleting Consumer Groups</li><li>• Batch Modifying Consumer Groups</li><li>• Deleting a Consumer Group</li><li>• Querying a Consumer Group</li><li>• Modifying a Consumer Group</li><li>• Querying the Consumer Group List or Details</li><li>• Resetting the Consumer Offset</li><li>• Querying the Consumer List</li></ul> |



| API                        | Description                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Topic Management</b>    | Includes: <ul style="list-style-type: none"> <li>• Creating a Topic or Deleting Topics in Batches</li> <li>• Querying the Topic List</li> <li>• Deleting a Topic</li> <li>• Querying a Topic</li> <li>• Modifying a Topic</li> <li>• Querying the Topic Consumer Group List</li> <li>• Querying the Number of Messages in a Topic</li> </ul>  |
| <b>Message Management</b>  | Includes: <ul style="list-style-type: none"> <li>• Querying Messages</li> <li>• Sending a Message</li> <li>• Querying the Message Trace</li> <li>• Exporting Dead Letter Messages</li> <li>• Resending Dead Letter Messages</li> <li>• Verifying Consumption</li> </ul>                                                                       |
| <b>User Management</b>     | Includes: <ul style="list-style-type: none"> <li>• Creating a User</li> <li>• Querying the User List</li> <li>• Modifying User Parameters</li> <li>• Querying User Details</li> <li>• Deleting a User</li> <li>• Querying Users Granted Permissions for a Topic</li> <li>• Querying Users Granted Permissions for a Consumer Group</li> </ul> |
| <b>Metadata Migration</b>  | Includes: <ul style="list-style-type: none"> <li>• Creating a Metadata Migration Task</li> <li>• Querying All Migration Tasks or a Specified Migration Task of an Instance</li> <li>• Deleting a Metadata Migration Task</li> </ul>                                                                                                           |
| <b>Managing Parameters</b> | Includes: <ul style="list-style-type: none"> <li>• Querying RocketMQ Configurations</li> <li>• Modifying RocketMQ Configurations</li> </ul>                                                                                                                                                                                                   |
| <b>Tag Management</b>      | Includes: <ul style="list-style-type: none"> <li>• Adding or Deleting Tags in Batches</li> <li>• Querying Instance Tags</li> <li>• Querying Project Tags</li> </ul>                                                                                                                                                                           |

| API                                          | Description                                                                                                                                                                                                                                                                                        |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Diagnosing an Instance</b>                | Includes: <ul style="list-style-type: none"><li>• Creating an Instance Diagnosis Task</li><li>• Querying an Instance Diagnosis Report List</li><li>• Deleting Instance Diagnosis Records in Batches</li><li>• Querying an Instance Diagnosis Report</li><li>• Querying Stack Information</li></ul> |
| <b>Specification Modification Management</b> | Includes: <ul style="list-style-type: none"><li>• Querying Product Information for Instance Specification Modification</li><li>• Modifying Instance Specifications</li></ul>                                                                                                                       |
| <b>Managing Instances</b>                    | Includes: <ul style="list-style-type: none"><li>• Querying an Instance Broker</li><li>• Restarting an Instance</li><li>• Modifying SSL of an Instance</li></ul>                                                                                                                                    |
| <b>Managing Background Tasks</b>             | Includes: <ul style="list-style-type: none"><li>• Querying a Specific Record from Background Tasks</li><li>• Deleting a Specific Record from Background Tasks</li><li>• Querying a Background Task List of an Instance</li></ul>                                                                   |
| <b>Other APIs</b>                            | Includes: <ul style="list-style-type: none"><li>• Querying AZ Information</li><li>• Querying Flavor List</li><li>• Querying vCPUs of a RocketMQ Flavor</li></ul>                                                                                                                                   |

# 3 Calling APIs

## 3.1 Making an API Request

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

### Request URI

A request URI is in the following format:

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

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

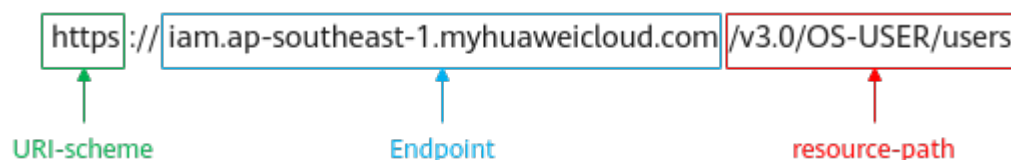
**Table 3-1** Parameters in a URI

| 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 <a href="#">Regions and Endpoints</a> .<br>For example, the endpoint of IAM in the <b>CN-Hong Kong</b> region is <b>iam.ap-southeast-1.myhuaweicloud.com</b> . |
| 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 for <b>creating an IAM user</b> is <b>/v3.0/OS-USER/users</b> .                                                                                                  |
| 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, <b>?limit=10</b> 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.ap-southeast-1.myhuaweicloud.com**) for this region and the resource-path (**/v3.0/OS-USER/users**) in the URI of the API for **creating an IAM user**. Then, construct the URI as follows:

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

**Figure 3-1** Example URI



#### NOTE

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

## Request Methods

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

- **GET:** requests a server to return specified resources.
- **PUT:** requests a server to update specified resources.
- **POST:** requests a server to add resources or perform special operations.
- **DELETE:** requests a server to delete specified resources, for example, objects.
- **HEAD:** same as GET except that the server must return only the response header.
- **PATCH:** requests a server to update a part of a specified resource. If the resource does not exist, a new resource can be created using the PATCH method.

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

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

## Request Header

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

**Table 3-2** lists the common request header fields.

**Table 3-2** Common request header fields

| Name           | Description                                                                                                                                                                                                                              | Mandatory                                                                                                                                     | Example Value                            |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| Host           | Request server information, which is obtained from the URL of a service API. The value is in the format of <i>Hostname.Port number</i> . If no port is specified, the default port will be used. For HTTPS, port 443 is used by default. | No<br><br>This parameter is mandatory for AK/SK authentication.                                                                               | code.test.com<br>or<br>code.test.com:443 |
| Content-Type   | Message body type or format. The default value <b>application/json</b> is recommended. Other values of this field will be provided for specific APIs if any.                                                                             | Yes                                                                                                                                           | application/json                         |
| Content-Length | Length of the request body. The unit is byte.                                                                                                                                                                                            | No                                                                                                                                            | 3495                                     |
| X-Project-Id   | Project ID. Obtain the project ID by following the instructions in <a href="#">Obtaining a Project ID</a> .                                                                                                                              | No<br><br>This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario. | e9993fc787d94b6c886cb<br>aa340f9c0f4     |

| Name         | Description                                                                                                                                                                                                                                                                      | Mandatory                                       | Example Value                                                                             |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------|
| X-Auth-Token | User token.<br>The user token is a response to the API used for <b>obtaining a user token</b> . This API is the only one that does not require authentication.<br>After the request is processed, the value of <b>X-Subject-Token</b> in the response header is the token value. | No<br>Mandatory for token-based authentication. | The following is part of an example token:<br>MIIPAgYJKoZlhvcNAQc-Co...ggg1BBIINPXsidG9rZ |

 NOTE

In addition to supporting token-based authentication, cloud service APIs also support authentication using the AK/SK. During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) 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 for **creating an IAM user** requires authentication using AK/SK. An example of such requests is as follows:

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

## Request Body (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.

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

For an API for **creating an IAM user**, the required parameter and description are in the request part of the API. An example of such requests is as follows. Use actual values in the bold fields.

- **accountid** indicates the account ID of the IAM user.
- **username** indicates the username of the IAM user to be created.
- **email** indicates the email of the IAM user.
- **\*\*\*\*\*** indicates the password of the IAM user.

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

```
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****

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

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

## 3.2 Authentication

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

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

### AK/SK-based Authentication

#### NOTE

AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.

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

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 signing SDK, see [API Request Signing Guide](#).

---

#### NOTICE

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

---

## Token-based Authentication

### NOTE

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

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

A cloud service can be deployed as either a project-level service or global service.

- For a project-level service, you need to obtain a project-level token. When you call the API, set **auth.scope** in the request body to **project**.
- For a global service, you need to obtain a global token. When you call the API, set **auth.scope** in the request body to **domain**.

When calling the API used for [obtaining a user token](#), you must set **auth.scope** in the request body to **project**.

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username", //IAM username.
          "password": $ADMIN_PASS, //IAM password. For security, you are advised to store it in
            ciphertext in the configuration file or environment variable.
          "domain": {
            "name": "domainname" //Name of the account of the IAM user.
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "xxxxxxx" //Project name.
      }
    }
  }
}
```

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

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

## 3.3 Returned Values

### Status Code

After sending a request, you will receive a response, including the 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 response. For more information, see [Status Code](#).

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

## Response Header

A response header corresponds to a request header, for example, **Content-type**.

[Figure 3-2](#) shows the response header for the API of [creating an IAM user](#).

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

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

## (Optional) Response Body

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

The response body for the API of [creating an IAM user](#) is shown as follows. The following shows part of the response body for the API to obtain a user token.

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

If an error occurs during API calling, the system returns an error code and a message to you. The following shows the format of an error response body:

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

In the preceding information, **error\_code** is an error code, and **error\_msg** describes the error.

# 4 Getting Started

## Scenarios

This section describes how to call an API to create a RocketMQ instance and customize the computing capabilities and storage space of the instance based on service requirements.

For details on how to call APIs, see [Calling APIs](#).

## Prerequisites

The endpoints of IAM and RocketMQ have been obtained. For details, see [Regions and Endpoints](#).

## Creating a RocketMQ Instance

The following is an example request for creating a RocketMQ instance:

```
{
  "name": "rocketmq-test",
  "engine": "reliability",
  "engine_version": "4.8.0",
  "storage_space": 600,
  "vpc_id": "ead6cxxxxx9ba91820e72c",
  "subnet_id": "3cb6axxxxxa7f671d6a8",
  "security_group_id": "d39c8xxxxxaa8510a498",
  "available_zones": [
    "effdcxxxxx2f56533"
  ],
  "product_id": "c6.4u8g.cluster",
  "storage_spec_code": "dms.physical.storage.high.v2",
  "broker_num": 1
}
```

- **name:** name of the instance.
- **engine:** message engine. The value is **reliability**.
- **engine\_version:** version of the message engine.
- **storage\_space:** message storage space in MB. For details about the value range, see [Creating an Instance](#).
- **vpc\_id:** ID of the Virtual Private Cloud (VPC) where the RocketMQ instance resides. You can query the VPC ID on the [VPC console](#) or by calling the [API for querying VPCs](#).

- **subnet\_id**: ID of the VPC subnet. You can obtain the value on the [VPC console](#) or by calling the [API for querying subnets](#).
- **security\_group\_id**: ID of the security group. You can obtain the value on the [VPC console](#) or by calling the [API for querying security groups](#).
- **available\_zones**: ID of the AZ where the instance resides. The value cannot be empty or null. Obtain the value by calling the API described in [Querying AZ Information](#).
- **product\_id**: ID of the product. For details about the value range, see Creating an Instance.
- **storage\_spec\_code**: storage I/O specification. For details about the value range, see Creating an Instance.
- **broker\_num**: number of brokers.

# 5 APIs V2 (Recommended)

## 5.1 Lifecycle Management

### 5.1.1 Querying the Instance List

#### Function

This API is used to query the instances of an account by the specified conditions.

#### Calling Method

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

#### URI

GET /v2/{project\_id}/instances

Table 5-1 Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                        |
|------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-2** Query Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine      | Yes       | String | <b>Parameter description:</b><br>Message engine.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                           |
| name        | No        | String | <b>Parameter description:</b><br>Instance name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                            |
| instance_id | No        | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| status      | No        | String | <b>Parameter description:</b><br>Instance status. For details, see <a href="#">Instance Status</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                       |

| Parameter             | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| include_failure       | No        | String | <p><b>Parameter description:</b><br/>Whether to return the number of instances that fail to be created.</p> <p><b>Constraints:</b><br/>N/A</p> <p><b>Value range:</b></p> <ul style="list-style-type: none"> <li>• 'true': yes</li> <li>• 'false': no</li> </ul> <p><b>Default value:</b><br/>N/A</p>                       |
| exact_match_name      | No        | String | <p><b>Parameter description:</b><br/>Whether to search for the instance that precisely matches a specified instance name.</p> <p><b>Constraints:</b><br/>N/A</p> <p><b>Value range:</b></p> <ul style="list-style-type: none"> <li>• 'true': yes</li> <li>• 'false': no</li> </ul> <p><b>Default value:</b><br/>'false'</p> |
| enterprise_project_id | No        | String | <p><b>Parameter description:</b><br/>Enterprise project ID.</p> <p><b>Constraints:</b><br/>N/A</p> <p><b>Value range:</b><br/>N/A</p> <p><b>Default value:</b><br/>N/A</p>                                                                                                                                                  |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                               |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | <b>Parameter description:</b><br>Maximum number of instances that can be returned in a query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>10 |
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>N/A                               |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-3 Response body parameters

| Parameter    | Type                                            | Description                                                                         |
|--------------|-------------------------------------------------|-------------------------------------------------------------------------------------|
| instances    | Array of <a href="#">InstanceDetail</a> objects | <b>Parameter description:</b><br>Instance list.<br><b>Value range:</b><br>N/A       |
| instance_num | Integer                                         | <b>Parameter description:</b><br>Number of instances.<br><b>Value range:</b><br>N/A |



**Table 5-4** InstanceDetail

| Parameter      | Type   | Description                                                                                                                                                                              |
|----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name           | String | <b>Parameter description:</b><br>Instance name.<br><b>Value range:</b><br>N/A                                                                                                            |
| engine         | String | <b>Parameter description:</b><br>Message engine.<br><b>Value range:</b><br>N/A                                                                                                           |
| status         | String | <b>Parameter description:</b><br>Status.<br><b>Value range:</b><br>N/A                                                                                                                   |
| description    | String | <b>Parameter description:</b><br>Message description.<br><b>Value range:</b><br>N/A                                                                                                      |
| type           | String | <b>Parameter description:</b><br>Instance type.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>single:</b> single-node</li> <li>• <b>cluster:</b> cluster</li> </ul> |
| specification  | String | <b>Parameter description:</b><br>Instance specification.<br><b>Value range:</b><br>N/A                                                                                                   |
| engine_version | String | <b>Parameter description:</b><br>Instance version.<br><b>Value range:</b><br>N/A                                                                                                         |
| instance_id    | String | <b>Parameter description:</b><br>Instance ID.<br><b>Value range:</b><br>N/A                                                                                                              |

| Parameter           | Type    | Description                                                                                                                                                                                                                    |
|---------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| charging_mode       | Integer | <b>Parameter description:</b><br>Billing mode.<br><b>Value range:</b><br>1: pay-per-use; 0: yearly/monthly.                                                                                                                    |
| vpc_id              | String  | <b>Parameter description:</b><br>VPC ID.<br><b>Value range:</b><br>N/A                                                                                                                                                         |
| vpc_name            | String  | <b>Parameter description:</b><br>VPC name.<br><b>Value range:</b><br>N/A                                                                                                                                                       |
| created_at          | String  | <b>Parameter description:</b><br>Time when creation is complete.<br>The time is in the format of timestamp, that is, the offset milliseconds from 1970-01-01 00:00:00 UTC to the specified time.<br><b>Value range:</b><br>N/A |
| product_id          | String  | <b>Parameter description:</b><br>Product ID.<br><b>Value range:</b><br>N/A                                                                                                                                                     |
| security_group_id   | String  | <b>Parameter description:</b><br>Security group ID.<br><b>Value range:</b><br>N/A                                                                                                                                              |
| security_group_name | String  | <b>Parameter description:</b><br>Security group name.<br><b>Value range:</b><br>N/A                                                                                                                                            |
| subnet_id           | String  | <b>Parameter description:</b><br>Subnet ID.<br><b>Value range:</b><br>N/A                                                                                                                                                      |

| Parameter             | Type             | Description                                                                                                                                                                                 |
|-----------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subnet_cidr           | String           | <b>Parameter description:</b><br>Subnet route. This field is displayed only for RocketMQ 5.x.<br><b>Value range:</b><br>N/A                                                                 |
| available_zones       | Array of strings | <b>Parameter description:</b><br>List of AZ IDs.<br><b>Value range:</b><br>N/A                                                                                                              |
| available_zone_names  | Array of strings | <b>Parameter description:</b><br>List of AZ names.                                                                                                                                          |
| user_id               | String           | <b>Parameter description:</b><br>User ID.<br><b>Value range:</b><br>N/A                                                                                                                     |
| user_name             | String           | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A                                                                                                                    |
| maintain_begin        | String           | <b>Parameter description:</b><br>Time at which the maintenance window starts. The format is <i>HH:mm:ss</i> .<br><b>Value range:</b><br>N/A                                                 |
| maintain_end          | String           | <b>Parameter description:</b><br>Time at which the maintenance window ends. The format is <i>HH:mm:ss</i> .<br><b>Value range:</b><br>N/A                                                   |
| enable_log_collection | Boolean          | <b>Parameter description:</b><br>Whether log collection is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |

| Parameter          | Type    | Description                                                                                                                                                                                                                                                              |
|--------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| storage_space      | Integer | <b>Parameter description:</b><br>Storage space, in GB.<br><b>Value range:</b><br>N/A                                                                                                                                                                                     |
| used_storage_space | Integer | <b>Parameter description:</b><br>Used message storage space, in GB.<br><b>Value range:</b><br>N/A                                                                                                                                                                        |
| enable_publicip    | Boolean | <b>Parameter description:</b><br>Whether to enable public access.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                                                                                |
| publicip_id        | String  | <b>Parameter description:</b><br>ID of the EIP bound to the instance.<br>Use commas (,) to separate multiple EIP IDs.<br>This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ).<br><b>Value range:</b><br>N/A |
| publicip_address   | String  | <b>Parameter description:</b><br>Public IP address.<br><b>Value range:</b><br>N/A                                                                                                                                                                                        |
| ssl_enable         | Boolean | <b>Parameter description:</b><br>Whether SSL is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                                                                                         |
| cross_vpc_info     | String  | <b>Parameter description:</b><br>Cross-VPC access information.<br><b>Value range:</b><br>N/A                                                                                                                                                                             |

| Parameter           | Type    | Description                                                                                                                                                                                  |
|---------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| storage_resource_id | String  | <b>Parameter description:</b><br>Storage resource ID.<br><b>Value range:</b><br>N/A                                                                                                          |
| storage_spec_code   | String  | <b>Parameter description:</b><br>Storage specification code.<br><b>Value range:</b><br>N/A                                                                                                   |
| service_type        | String  | <b>Parameter description:</b><br>Service type.<br><b>Value range:</b><br>N/A                                                                                                                 |
| storage_type        | String  | <b>Parameter description:</b><br>Storage type.<br><b>Value range:</b><br>N/A                                                                                                                 |
| extend_times        | Long    | <b>Parameter description:</b><br>Extension time.<br><b>Value range:</b><br>N/A                                                                                                               |
| ipv6_enable         | Boolean | <b>Parameter description:</b><br>Whether IPv6 is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>            |
| support_features    | String  | <b>Parameter description:</b><br>Features supported by the instance.<br><b>Value range:</b><br>N/A                                                                                           |
| disk_encrypted      | Boolean | <b>Parameter description:</b><br>Whether disk encryption is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |

| Parameter               | Type    | Description                                                                                                                                                                                                      |
|-------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ces_version             | String  | <b>Parameter description:</b><br>Cloud Eye version.<br><b>Value range:</b><br>N/A                                                                                                                                |
| node_num                | Integer | <b>Parameter description:</b><br>Number of nodes.<br><b>Value range:</b><br>N/A                                                                                                                                  |
| new_spec_billing_enable | Boolean | <b>Parameter description:</b><br>Whether billing based on new specifications is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |
| enable_acl              | Boolean | <b>Parameter description:</b><br>Whether access control is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                      |
| broker_num              | Integer | <b>Parameter description:</b><br>Number of brokers (displayed only for RocketMQ 4.8.0).<br><b>Value range:</b><br>N/A                                                                                            |
| dns_enable              | Boolean | <b>Parameter description:</b><br>Whether to enable domain name access to an instance.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>    |
| namesrv_address         | String  | <b>Parameter description:</b><br>Metadata address.<br><b>Value range:</b><br>N/A                                                                                                                                 |

| Parameter                  | Type   | Description                                                                                                                      |
|----------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| namesrv_domain_name        | String | <b>Parameter description:</b><br>Metadata domain name.<br><b>Value range:</b><br>N/A                                             |
| broker_address             | String | <b>Parameter description:</b><br>Service data address.<br><b>Value range:</b><br>N/A                                             |
| public_namesrv_address     | String | <b>Parameter description:</b><br>Public network metadata address.<br><b>Value range:</b><br>N/A                                  |
| public_namesrv_domain_name | String | <b>Parameter description:</b><br>Public metadata domain name.<br><b>Value range:</b><br>N/A                                      |
| public_broker_address      | String | <b>Parameter description:</b><br>Public network service data address.<br><b>Value range:</b><br>N/A                              |
| grpc_address               | String | <b>Parameter description:</b><br>gRPC connection address (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A        |
| grpc_domain_name           | String | <b>Parameter description:</b><br>gRPC connection domain name (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A    |
| public_grpc_address        | String | <b>Parameter description:</b><br>Public gRPC connection address (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A |

| Parameter               | Type                                       | Description                                                                                                               |
|-------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| public_grpc_domain_name | String                                     | <b>Parameter description:</b><br>Public gRPC domain name (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A |
| enterprise_project_id   | String                                     | <b>Parameter description:</b><br>Enterprise project ID.<br><b>Value range:</b><br>N/A                                     |
| tags                    | Array of <a href="#">TagEntity</a> objects | <b>Parameter description:</b><br>Tag list.<br><b>Value range:</b><br>N/A                                                  |
| total_storage_space     | Integer                                    | <b>Parameter description:</b><br>Total storage space.<br><b>Value range:</b><br>N/A                                       |
| resource_spec_code      | String                                     | <b>Parameter description:</b><br>Resource flavor.<br><b>Value range:</b><br>N/A                                           |
| produce_portion         | Integer                                    | <b>Parameter description:</b><br>Production TPS proportion.<br><b>Value range:</b><br>N/A                                 |
| consume_portion         | Integer                                    | <b>Parameter description:</b><br>Consumption TPS proportion.<br><b>Value range:</b><br>N/A                                |
| dr_enable               | Boolean                                    | <b>Parameter description:</b><br>Whether DR is enabled.<br><b>Value range:</b><br>N/A                                     |



| Parameter                       | Type    | Description                                                                                                    |
|---------------------------------|---------|----------------------------------------------------------------------------------------------------------------|
| config_ssl_need_restart_process | Boolean | <b>Parameter description:</b><br>Whether a restart is required to configure SSL.<br><b>Value range:</b><br>N/A |
| tls_mode                        | String  | <b>Parameter description:</b><br>Security protocol used by the instance.<br><b>Value range:</b><br>N/A         |

**Table 5-5** TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | <b>Definition:</b><br>Tag key.<br><b>Constraints:</b> <ul style="list-style-type: none"> <li>• Cannot be left blank.</li> <li>• Must be unique for the same instance.</li> <li>• Can contain 1 to 128 characters.</li> <li>• Can contain letters, digits, spaces, and special characters _.:=-@</li> <li>• Cannot start with <i>sys</i></li> <li>• Cannot start or end with a space.</li> </ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                           |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value     | String | <b>Definition:</b><br>Tag value.<br><b>Constraints:</b> <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>_.:=-@</code></li><li>• Cannot start or end with a space.</li></ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

## Example Requests

Querying the list of all instances

```
GET https://{endpoint}/v2/{project_id}/instances?engine=reliability
```

## Example Responses

**Status code: 200**

Instance list queried successfully.

```
{
  "instances": [ {
    "name": "reliability-ztest",
    "engine": "reliability",
    "status": "RUNNING",
    "description": "",
    "type": "cluster",
    "specification": "c6.4u8g.cluster * 1 broker",
    "engine_version": "4.8.0",
    "instance_id": "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
    "resource_spec_code": "",
    "charging_mode": 1,
    "vpc_id": "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
    "vpc_name": "vpc-1101840",
    "created_at": "1636699753874",
    "product_id": "c6.4u8g.cluster",
    "security_group_id": "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
    "security_group_name": "Sys-default",
    "subnet_id": "0a0f1fcb-f019-458d-b9e5-301867394d50",
    "available_zones": [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
    "available_zone_names": [ "AZ3" ],
    "user_id": "0b01fbb53600d4671fa8c00673c71260",
    "user_name": "",
    "maintain_begin": "02:00:00",
    "maintain_end": "06:00:00",
    "enable_log_collection": false,
    "storage_space": 558,
    "total_storage_space": 600,
    "used_storage_space": 28,
    "enable_publicip": false,
    "ssl_enable": false,
  } ]
}
```

```
"cross_vpc_info" : "{\n  \"192.168.1.21\" : {\n    \"advertised_ip\" : \"192.168.1.21\", \"broker_port\" : \"-\", \"port_id\" : \"fa020857-d899-497c-a5f8-8dd90ed67ff7\", \"namesrv_port\" : \"8301\", \"192.168.1.246\" : {\n      \"advertised_ip\" : \"192.168.1.246\", \"broker_port\" : \"10100\", \"port_id\" : \"c0f0586f-a4ee-41b5-a7f1-b4e554bbf12d\", \"namesrv_port\" : \"-\", \"192.168.1.77\" : {\n        \"advertised_ip\" : \"192.168.1.77\", \"broker_port\" : \"10101\", \"port_id\" : \"8eb1d144-4315-402f-8498-37c9a10b630c\", \"namesrv_port\" : \"-\", \"192.168.1.159\" : {\n          \"advertised_ip\" : \"192.168.1.159\", \"broker_port\" : \"-\", \"port_id\" : \"d35b22af-a202-4329-bda4-26e1bdf2aa8e\", \"namesrv_port\" : \"8300\", \"192.168.1.14\" : {\n            \"advertised_ip\" : \"192.168.1.14\", \"broker_port\" : \"10102\", \"port_id\" : \"5fcb50fd-3af5-4123-a455-a67f1b926026\", \"namesrv_port\" : \"-\"}\n          }\n        }\n      }\n    }\n  },\n  \"storage_resource_id\" : \"164bdaef-2e67-4fd5-be8b-a18f91d455a2\", \"storage_spec_code\" : \"dms.physical.storage.ultra.v2\", \"service_type\" : \"advanced\", \"storage_type\" : \"hec\", \"enterprise_project_id\" : \"0\", \"extend_times\" : 0, \"ipv6_enable\" : false, \"support_features\" : \"kafka.crossvpc.domain.enable,feature.physerver.kafka.topic.accesspolicy,rabbitmq.plugin.management,rocketmq.acl,roma.app_enable,auto_topic_switch,feature.physerver.kafka.user.manager.enable,new.authinfo,route,kafka.config.dynamic.modify.enable,kafka.new.pod.port,feature.physerver.kafka.topic.modify,message_trace_enable,features.pod.token.access,kafka.ssl.cert.modify.enable,roma.user.manage.no.support,feature.physerver.kafka.public.dynamic,features.log.collection,kafka.config.static.modify.enable\", \"disk_encrypted\" : false, \"ces_version\" : \"linux,v1,v2\", \"node_num\" : 5, \"new_spec_billing_enable\" : true, \"broker_num\" : 1, \"namesrv_address\" : \"***\", \"broker_address\" : \"***\", \"public_namesrv_address\" : \"***\", \"public_broker_address\" : \"***\", \"grpc_address\" : \"***\", \"public_grpc_address\" : \"***\"\n},\n\"instance_num\" : 1\n}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListInstancesSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ListInstancesRequest request = new ListInstancesRequest();
try {
    ListInstancesResponse response = client.listInstances(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListInstancesRequest()
        response = client.list_instances(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"
rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListInstancesRequest{}
    response, err := client.ListInstances(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         | Instance list queried successfully. |

## Error Codes

See [Error Codes](#).

### 5.1.2 Creating an Instance

#### Function

This API is used to create an instance, and pay-per-use and yearly/monthly billing modes are supported.

## Calling Method

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

## URI

POST /v2/{engine}/{project\_id}/instances

**Table 5-6** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                           |
|------------|-----------|--------|-----------------------------------------------------------------------|
| engine     | Yes       | String | Message engine.                                                       |
| project_id | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-7** Request body parameters

| Parameter      | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                      |
|----------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name           | Yes       | String  | Instance name.<br>An instance name can contain 4 to 64 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.                                                                                                                                                                           |
| description    | No        | String  | Description of an instance.<br>The description supports up to 1024 characters.<br><b>NOTE</b><br>The backslash (\) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character (\) before the characters, for example, \ and \". |
| engine         | Yes       | String  | Message engine. Value: <b>reliability</b> .                                                                                                                                                                                                                                                                      |
| engine_version | Yes       | String  | Version of the message engine. The value can be 4.8.0.                                                                                                                                                                                                                                                           |
| storage_space  | Yes       | Integer | Storage space.                                                                                                                                                                                                                                                                                                   |

| Parameter         | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|-----------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| vpc_id            | Yes       | String           | VPC ID.<br>To obtain it, log in to the VPC console and view the VPC ID on the VPC details page.                                                                                                                                                                                                                                                                                               |
| subnet_id         | Yes       | String           | Subnet information.<br>To obtain it, log in to VPC console and click the target subnet on the <b>Subnets</b> page. You can view the network ID on the displayed page.                                                                                                                                                                                                                         |
| security_group_id | Yes       | String           | ID of the security group to which the instance belongs.<br>To obtain it, log in to the VPC console and view the security group ID on the security group details page.                                                                                                                                                                                                                         |
| available_zones   | Yes       | Array of strings | ID of the AZ where instance brokers reside and which has available resources. Obtain the AZ ID by referring to <a href="#">Listing AZ Information</a> .<br>The parameter value cannot be empty or null. Check whether resources exist in the AZs.<br>A RocketMQ instance can be deployed in 1 AZ or at least 3 AZs. When specifying AZs for brokers, use commas (,) to separate multiple AZs. |

| Parameter             | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| product_id            | Yes       | String  | <b>RocketMQ instance flavors.</b> <ul style="list-style-type: none"> <li>• <b>c6.4u8g.cluster.small</b>: Max. 2,000 topics and 2,000 consumer groups per broker</li> <li>• <b>c6.4u8g.cluster</b>: Max. 4,000 topics and 4,000 consumer groups per broker</li> <li>• <b>c6.8u16g.cluster</b>: Max. 8,000 topics and 8,000 consumer groups per broker</li> <li>• <b>c6.12u24g.cluster</b>: Max. 12,000 topics and 12,000 consumer groups per broker</li> <li>• <b>c6.16u32g.cluster</b>: Max. 16,000 topics and 16,000 consumer groups per broker</li> </ul> |
| ssl_enable            | No        | Boolean | Whether to enable SSL encryption for access. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                       |
| storage_spec_code     | Yes       | String  | Storage I/O specification. <ul style="list-style-type: none"> <li>• <b>dms.physical.storage.high.v2</b>: high I/O disk</li> <li>• <b>dms.physical.storage.ultra.v2</b>: ultra-high I/O disk</li> <li>• <b>dms.physical.storage.general</b>: General Purpose SSD EVS.</li> <li>• <b>dms.physical.storage.extreme</b>: Extreme SSD EVS.</li> </ul>                                                                                                                                                                                                            |
| enterprise_project_id | No        | String  | Enterprise project ID. This parameter is mandatory for an enterprise project account.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| enable_acl            | No        | Boolean | Whether to enable access control.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ipv6_enable           | No        | Boolean | Indicates whether IPv6 is supported. <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                       |



| Parameter       | Mandatory | Type                   | Description                                                                                                                                                                                                    |
|-----------------|-----------|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| proxy_enable    | No        | Boolean                | Whether to enable the proxy function.<br><ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>                                                                      |
| enable_publicip | No        | Boolean                | Whether to enable public access. By default, public access is disabled.<br><ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>                            |
| publicip_id     | No        | String                 | ID of the EIP bound to the instance.<br>Use commas (,) to separate multiple EIP IDs.<br>This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ).      |
| broker_num      | Yes       | Integer                | Number of brokers.                                                                                                                                                                                             |
| arch_type       | No        | String                 | Architecture type.                                                                                                                                                                                             |
| tls_mode        | No        | String                 | Security protocol used by an instance.                                                                                                                                                                         |
| bss_param       | No        | <b>BssParam</b> object | Parameter related to the yearly/monthly billing mode.<br>If this parameter is left blank, the billing mode is pay-per-use by default. If this parameter is not left blank, the billing mode is yearly/monthly. |

**Table 5-8** BssParam

| Parameter     | Mandatory | Type    | Description                                                                                                                                                                                                                                                                        |
|---------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| is_auto_renew | No        | Boolean | Whether auto renewal is enabled.<br>Options:<br><ul style="list-style-type: none"> <li>• <b>true</b>: Auto renewal is enabled.</li> <li>• <b>false</b>: Auto renewal is not enabled.</li> </ul> By default, auto renewal is disabled.                                              |
| charging_mode | No        | String  | Billing mode.<br>This parameter specifies a payment mode.<br>Options:<br><ul style="list-style-type: none"> <li>• <b>prePaid</b>: yearly/monthly billing.</li> <li>• <b>postPaid</b>: pay-per-use billing.</li> </ul> The default value is <b>postPaid</b> .                       |
| is_auto_pay   | No        | Boolean | Specifies whether the order is automatically or manually paid.<br>Options:<br><ul style="list-style-type: none"> <li>• <b>true</b>: The order will be automatically paid.</li> <li>• <b>false</b>: The order must be manually paid.</li> </ul> The default payment mode is manual. |
| period_type   | No        | String  | Subscription period type.<br>Options:<br><ul style="list-style-type: none"> <li>• <b>month</b></li> <li>• <b>year</b>:</li> </ul> <b>**This parameter is valid and mandatory only when <b>chargingMode</b> is set to <b>prePaid</b>. **</b>                                        |

| Parameter  | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                              |
|------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| period_num | No        | Integer | Subscribed periods.<br>Options: <ul style="list-style-type: none"><li>• If <b>periodType</b> is <b>month</b>, the value ranges from <b>1</b> to <b>9</b>.</li><li>• If <b>periodType</b> is <b>year</b>, the value ranges from <b>1</b> to <b>3</b>.</li></ul> <b>**This parameter is valid and mandatory only when <b>chargingMode</b> is set to <b>prePaid</b>. **</b> |

## Response Parameters

Status code: 200

Table 5-9 Response body parameters

| Parameter   | Type   | Description  |
|-------------|--------|--------------|
| instance_id | String | Instance ID. |

## Example Requests

Creating a pay-per-use RocketMQ instance with the 4 vCPUs | 8 GB x 1 specifications and 600 GB storage space

POST https://{endpoint}/v2/reliability/{project\_id}/instances

```
{
  "name" : "reliability-1751840557",
  "description" : "",
  "engine" : "reliability",
  "engine_version" : "4.8.0",
  "storage_space" : 600,
  "vpc_id" : "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
  "subnet_id" : "0a0f1fcb-f019-458d-b9e5-301867394d50",
  "security_group_id" : "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
  "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
  "product_id" : "c6.4u8g.cluster",
  "enterprise_project_id" : "0",
  "ssl_enable" : false,
  "storage_spec_code" : "dms.physical.storage.ultra.v2",
  "ipv6_enable" : false,
  "enable_publicip" : false,
  "publicip_id" : "",
  "broker_num" : 1
}
```

## Example Responses

Status code: 200

Instance created successfully.

```
{
  "instance_id" : "8959ab1c-7n1a-yyb1-a05t-93dfc361b32d"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a pay-per-use RocketMQ instance with the 4 vCPUs | 8 GB x 1 specifications and 600 GB storage space

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class CreateInstanceByEngineSolution {

    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);

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

        CreateInstanceByEngineRequest request = new CreateInstanceByEngineRequest();
        request.withEngine(CreateInstanceByEngineRequest.EngineEnum.fromValue("{engine}"));
        CreateInstanceByEngineReq body = new CreateInstanceByEngineReq();
        List<String> listbodyAvailableZones = new ArrayList<>();
        listbodyAvailableZones.add("9f1c5806706d4c1fb0eb72f0a9b18c77");
        body.withBrokerNum(1);
        body.withPublicId("");
        body.withEnablePublicip(false);
        body.withIpv6Enable(false);
        body.withEnterpriseProjectId("0");

        body.withStorageSpecCode(CreateInstanceByEngineReq.StorageSpecCodeEnum.fromValue("dms.physical.stor
age.ultra.v2"));
        body.withSslEnable(false);
        body.withProductId(CreateInstanceByEngineReq.ProductIdEnum.fromValue("c6.4u8g.cluster"));
        body.withAvailableZones(listbodyAvailableZones);
        body.withSecurityGroupId("23c5977f-ff33-4b95-a73e-08d8a0bc4e6c");
```

```
body.withSubnetId("0a0f1fcb-f019-458d-b9e5-301867394d50");
body.withVpcId("3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf");
body.withStorageSpace(600);
body.withEngineVersion(CreateInstanceByEngineReq.EngineVersionEnum.fromValue("4.8.0"));
body.withEngine(CreateInstanceByEngineReq.EngineEnum.fromValue("reliability"));
body.withDescription("");
body.withName("reliability-1751840557");
request.withBody(body);
try {
    CreateInstanceByEngineResponse response = client.createInstanceByEngine(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 pay-per-use RocketMQ instance with the 4 vCPUs | 8 GB x 1 specifications and 600 GB storage space

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateInstanceByEngineRequest()
        request.engine = "{engine}"
        listAvailableZonesbody = [
            "9f1c5806706d4c1fb0eb72f0a9b18c77"
        ]
        request.body = CreateInstanceByEngineReq(
            broker_num=1,
            publicip_id="",
            enable_publicip=False,
            ipv6_enable=False,
            enterprise_project_id="0",
            storage_spec_code="dms.physical.storage.ultra.v2",
            ssl_enable=False,
```

```
        product_id="c6.4u8g.cluster",
        available_zones=listAvailableZonesbody,
        security_group_id="23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
        subnet_id="0a0f1fcb-f019-458d-b9e5-301867394d50",
        vpc_id="3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
        storage_space=600,
        engine_version="4.8.0",
        engine="reliability",
        description="",
        name="reliability-1751840557"
    )
    response = client.create_instance_by_engine(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 pay-per-use RocketMQ instance with the 4 vCPUs | 8 GB x 1 specifications and 600 GB storage space

package main

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateInstanceByEngineRequest{}
    request.Engine = model.GetCreateInstanceByEngineRequestEngineEnum().ENGINE
    var listAvailableZonesbody = []string{
        "9f1c5806706d4c1fb0eb72f0a9b18c77",
    }
    publicIpCreateInstanceByEngineReq := ""
    enablePublicIpCreateInstanceByEngineReq := false
    ipv6EnableCreateInstanceByEngineReq := false
    enterpriseProjectIdCreateInstanceByEngineReq := "0"
    sslEnableCreateInstanceByEngineReq := false
    descriptionCreateInstanceByEngineReq := ""
    request.Body = &model.CreateInstanceByEngineReq{
        BrokerNum: int32(1),
```

```
PublicIpId: &publicIpIdCreateInstanceByEngineReq,
EnablePublicIp: &enablePublicIpCreateInstanceByEngineReq,
Ipv6Enable: &ipv6EnableCreateInstanceByEngineReq,
EnterpriseProjectId: &enterpriseProjectIdCreateInstanceByEngineReq,
StorageSpecCode:
model.GetCreateInstanceByEngineReqStorageSpecCodeEnum().DMS_PHYSICAL_STORAGE_ULTRA,
SslEnable: &sslEnableCreateInstanceByEngineReq,
ProductId: model.GetCreateInstanceByEngineReqProductIdEnum().C6_4U8G_CLUSTER,
AvailableZones: listAvailableZonesbody,
SecurityGroupId: "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
SubnetId: "0a0f1fcb-f019-458d-b9e5-301867394d50",
VpcId: "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
StorageSpace: int32(600),
EngineVersion: model.GetCreateInstanceByEngineReqEngineVersionEnum().E_4_8_0,
Engine: model.GetCreateInstanceByEngineReqEngineEnum().RELIABILITY,
Description: &descriptionCreateInstanceByEngineReq,
Name: "reliability-1751840557",
}
response, err := client.CreateInstanceByEngine(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         | Instance created successfully. |

## Error Codes

See [Error Codes](#).

## 5.1.3 Querying an Instance

### Function

This API is used to query the details about a specified instance.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}

Table 5-10 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-11 Response body parameters

| Parameter | Type   | Description                                                                   |
|-----------|--------|-------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Instance name.<br><b>Value range:</b><br>N/A |



| Parameter      | Type    | Description                                                                                                                                                                              |
|----------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine         | String  | <b>Parameter description:</b><br>Message engine.<br><b>Value range:</b><br>N/A                                                                                                           |
| status         | String  | <b>Parameter description:</b><br>Status.<br><b>Value range:</b><br>N/A                                                                                                                   |
| description    | String  | <b>Parameter description:</b><br>Message description.<br><b>Value range:</b><br>N/A                                                                                                      |
| type           | String  | <b>Parameter description:</b><br>Instance type.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>single:</b> single-node</li> <li>• <b>cluster:</b> cluster</li> </ul> |
| specification  | String  | <b>Parameter description:</b><br>Instance specification.<br><b>Value range:</b><br>N/A                                                                                                   |
| engine_version | String  | <b>Parameter description:</b><br>Instance version.<br><b>Value range:</b><br>N/A                                                                                                         |
| instance_id    | String  | <b>Parameter description:</b><br>Instance ID.<br><b>Value range:</b><br>N/A                                                                                                              |
| charging_mode  | Integer | <b>Parameter description:</b><br>Billing mode.<br><b>Value range:</b><br>1: pay-per-use; 0: yearly/monthly.                                                                              |

| Parameter           | Type   | Description                                                                                                                                                                                                                    |
|---------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| vpc_id              | String | <b>Parameter description:</b><br>VPC ID.<br><b>Value range:</b><br>N/A                                                                                                                                                         |
| vpc_name            | String | <b>Parameter description:</b><br>VPC name.<br><b>Value range:</b><br>N/A                                                                                                                                                       |
| created_at          | String | <b>Parameter description:</b><br>Time when creation is complete.<br>The time is in the format of timestamp, that is, the offset milliseconds from 1970-01-01 00:00:00 UTC to the specified time.<br><b>Value range:</b><br>N/A |
| product_id          | String | <b>Parameter description:</b><br>Product ID.<br><b>Value range:</b><br>N/A                                                                                                                                                     |
| security_group_id   | String | <b>Parameter description:</b><br>Security group ID.<br><b>Value range:</b><br>N/A                                                                                                                                              |
| security_group_name | String | <b>Parameter description:</b><br>Security group name.<br><b>Value range:</b><br>N/A                                                                                                                                            |
| subnet_id           | String | <b>Parameter description:</b><br>Subnet ID.<br><b>Value range:</b><br>N/A                                                                                                                                                      |
| subnet_name         | String | <b>Parameter description:</b><br>Subnet name.<br><b>Value range:</b><br>N/A                                                                                                                                                    |

| Parameter             | Type             | Description                                                                                                                                                                                 |
|-----------------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subnet_cidr           | String           | <b>Parameter description:</b><br>Subnet route. This field is displayed only for RocketMQ 5.x.<br><b>Value range:</b><br>N/A                                                                 |
| available_zones       | Array of strings | <b>Parameter description:</b><br>List of AZ IDs.<br><b>Value range:</b><br>N/A                                                                                                              |
| available_zone_names  | Array of strings | <b>Parameter description:</b><br>List of AZ names.                                                                                                                                          |
| user_id               | String           | <b>Parameter description:</b><br>User ID.<br><b>Value range:</b><br>N/A                                                                                                                     |
| user_name             | String           | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A                                                                                                                    |
| maintain_begin        | String           | <b>Parameter description:</b><br>Time at which the maintenance window starts. The format is <i>HH:mm:ss</i> .<br><b>Value range:</b><br>N/A                                                 |
| maintain_end          | String           | <b>Parameter description:</b><br>Time at which the maintenance window ends. The format is <i>HH:mm:ss</i> .<br><b>Value range:</b><br>N/A                                                   |
| enable_log_collection | Boolean          | <b>Parameter description:</b><br>Whether log collection is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |

| Parameter          | Type    | Description                                                                                                                                                                                                                                                              |
|--------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| storage_space      | Integer | <b>Parameter description:</b><br>Storage space, in GB.<br><b>Value range:</b><br>N/A                                                                                                                                                                                     |
| used_storage_space | Integer | <b>Parameter description:</b><br>Used message storage space, in GB.<br><b>Value range:</b><br>N/A                                                                                                                                                                        |
| enable_publicip    | Boolean | <b>Parameter description:</b><br>Whether to enable public access.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                                                                                |
| publicip_id        | String  | <b>Parameter description:</b><br>ID of the EIP bound to the instance.<br>Use commas (,) to separate multiple EIP IDs.<br>This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ).<br><b>Value range:</b><br>N/A |
| publicip_address   | String  | <b>Parameter description:</b><br>Public IP address.<br><b>Value range:</b><br>N/A                                                                                                                                                                                        |
| ssl_enable         | Boolean | <b>Parameter description:</b><br>Whether SSL is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                                                                                         |
| cross_vpc_info     | String  | <b>Parameter description:</b><br>Cross-VPC access information.<br><b>Value range:</b><br>N/A                                                                                                                                                                             |

| Parameter           | Type    | Description                                                                                                                                                                                  |
|---------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| storage_resource_id | String  | <b>Parameter description:</b><br>Storage resource ID.<br><b>Value range:</b><br>N/A                                                                                                          |
| storage_spec_code   | String  | <b>Parameter description:</b><br>Storage specification code.<br><b>Value range:</b><br>N/A                                                                                                   |
| service_type        | String  | <b>Parameter description:</b><br>Service type.<br><b>Value range:</b><br>N/A                                                                                                                 |
| storage_type        | String  | <b>Parameter description:</b><br>Storage type.<br><b>Value range:</b><br>N/A                                                                                                                 |
| extend_times        | Long    | <b>Parameter description:</b><br>Extension time.<br><b>Value range:</b><br>N/A                                                                                                               |
| ipv6_enable         | Boolean | <b>Parameter description:</b><br>Whether IPv6 is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>            |
| support_features    | String  | <b>Parameter description:</b><br>Features supported by the instance.<br><b>Value range:</b><br>N/A                                                                                           |
| disk_encrypted      | Boolean | <b>Parameter description:</b><br>Whether disk encryption is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |

| Parameter               | Type    | Description                                                                                                                                                                                                      |
|-------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ces_version             | String  | <b>Parameter description:</b><br>Cloud Eye version.<br><b>Value range:</b><br>N/A                                                                                                                                |
| node_num                | Integer | <b>Parameter description:</b><br>Number of nodes.<br><b>Value range:</b><br>N/A                                                                                                                                  |
| new_spec_billing_enable | Boolean | <b>Parameter description:</b><br>Whether billing based on new specifications is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> |
| enable_acl              | Boolean | <b>Parameter description:</b><br>Whether access control is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>                      |
| broker_num              | Integer | <b>Parameter description:</b><br>Number of brokers (displayed only for RocketMQ 4.8.0).<br><b>Value range:</b><br>N/A                                                                                            |
| dns_enable              | Boolean | <b>Parameter description:</b><br>Whether to enable domain name access to an instance.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul>    |
| namesrv_address         | String  | <b>Parameter description:</b><br>Metadata address.<br><b>Value range:</b><br>N/A                                                                                                                                 |

| Parameter                  | Type   | Description                                                                                                                      |
|----------------------------|--------|----------------------------------------------------------------------------------------------------------------------------------|
| namesrv_domain_name        | String | <b>Parameter description:</b><br>Metadata domain name.<br><b>Value range:</b><br>N/A                                             |
| broker_address             | String | <b>Parameter description:</b><br>Service data address.<br><b>Value range:</b><br>N/A                                             |
| public_namesrv_address     | String | <b>Parameter description:</b><br>Public network metadata address.<br><b>Value range:</b><br>N/A                                  |
| public_namesrv_domain_name | String | <b>Parameter description:</b><br>Public metadata domain name.<br><b>Value range:</b><br>N/A                                      |
| public_broker_address      | String | <b>Parameter description:</b><br>Public network service data address.<br><b>Value range:</b><br>N/A                              |
| grpc_address               | String | <b>Parameter description:</b><br>gRPC connection address (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A        |
| grpc_domain_name           | String | <b>Parameter description:</b><br>gRPC connection domain name (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A    |
| public_grpc_address        | String | <b>Parameter description:</b><br>Public gRPC connection address (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A |

| Parameter               | Type                                       | Description                                                                                                               |
|-------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| public_grpc_domain_name | String                                     | <b>Parameter description:</b><br>Public gRPC domain name (displayed only for RocketMQ 5.x).<br><b>Value range:</b><br>N/A |
| enterprise_project_id   | String                                     | <b>Parameter description:</b><br>Enterprise project ID.<br><b>Value range:</b><br>N/A                                     |
| tags                    | Array of <a href="#">TagEntity</a> objects | <b>Parameter description:</b><br>Tag list.<br><b>Value range:</b><br>N/A                                                  |
| total_storage_space     | Integer                                    | <b>Parameter description:</b><br>Total storage space.<br><b>Value range:</b><br>N/A                                       |
| resource_spec_code      | String                                     | <b>Parameter description:</b><br>Resource flavor.<br><b>Value range:</b><br>N/A                                           |
| produce_portion         | Integer                                    | <b>Parameter description:</b><br>Production TPS proportion.<br><b>Value range:</b><br>N/A                                 |
| consume_portion         | Integer                                    | <b>Parameter description:</b><br>Consumption TPS proportion.<br><b>Value range:</b><br>N/A                                |
| dr_enable               | Boolean                                    | <b>Parameter description:</b><br>Whether DR is enabled.<br><b>Value range:</b><br>N/A                                     |



| Parameter                       | Type    | Description                                                                                                    |
|---------------------------------|---------|----------------------------------------------------------------------------------------------------------------|
| config_ssl_need_restart_process | Boolean | <b>Parameter description:</b><br>Whether a restart is required to configure SSL.<br><b>Value range:</b><br>N/A |
| tls_mode                        | String  | <b>Parameter description:</b><br>Security protocol used by the instance.<br><b>Value range:</b><br>N/A         |

**Table 5-12** TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | <b>Definition:</b><br>Tag key.<br><b>Constraints:</b> <ul style="list-style-type: none"> <li>• Cannot be left blank.</li> <li>• Must be unique for the same instance.</li> <li>• Can contain 1 to 128 characters.</li> <li>• Can contain letters, digits, spaces, and special characters <code>_:=+~@</code></li> <li>• Cannot start with <b>sys</b></li> <li>• Cannot start or end with a space.</li> </ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                           |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value     | String | <b>Definition:</b><br>Tag value.<br><b>Constraints:</b> <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>_:=+~@</code></li><li>• Cannot start or end with a space.</li></ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

## Example Requests

Querying details of a specified instance

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}
```

## Example Responses

**Status code: 200**

Instance queried successfully.

```
{
  "name" : "reliability-test",
  "engine" : "reliability",
  "status" : "RUNNING",
  "description" : "",
  "type" : "single.basic",
  "specification" : "rocketmq.b1.large.1, 500 tps",
  "engine_version" : "5.x",
  "instance_id" : "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
  "resource_spec_code" : "",
  "charging_mode" : 1,
  "vpc_id" : "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
  "vpc_name" : "vpc-1101840",
  "created_at" : "1636699753874",
  "product_id" : "rocketmq.b1.large.1",
  "security_group_id" : "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
  "security_group_name" : "security_group_test",
  "subnet_id" : "0a0f1fcb-f019-458d-b9e5-301867394d50",
  "subnet_name" : "subnet-test",
  "subnet_cidr" : "192.168.64.0/18",
  "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
  "available_zone_names" : [ "AZ3" ],
  "user_id" : "0b01fbb53600d4671fa8c00673c71260",
  "user_name" : "user_test",
  "maintain_begin" : "02:00:00",
  "maintain_end" : "06:00:00",
  "enable_log_collection" : false,
  "storage_space" : 558,
  "total_storage_space" : 600,
  "used_storage_space" : 28,
  "enable_publicip" : true,
```

```
"publicip_id" : "83924171-7014-48f0-a6b2-c714e7a090dd",
"publicip_address" : "****",
"ssl_enable" : false,
"cross_vpc_info" : "{ \"192.168.93.114\" : { \"advertised_ip\" : \"192.168.93.114\", \"broker_port\" : \"10100\", \"port_id\" : \"b3de3981-1f73-4e6f-b35a-78833b783364\", \"namesrv_port\" : \"8300\" } }",
"storage_resource_id" : "164bdaef-2e67-4fd5-be8b-a18f91d455a2",
"storage_spec_code" : "dms.physical.storage.ultra.v2",
"service_type" : "advanced",
"storage_type" : "hec",
"enterprise_project_id" : "0",
"extend_times" : 0,
"ipv6_enable" : false,
"support_features" :
"kafka.crossvpc.domain.enable,auto.create.topics.enable,rabbitmq.plugin.management,support.permissive.mode,auto.topic.switch,feature.physerver.kafka.user.manager,kafka.ssl.2way.modify.enable,kafka.new.pod.port,message_trace_enable,features.pod.token.access,log.enable,features.log.collection,max.connections,rabbitmq.manage.support,replica_port_standalone,feature.physerver.kafka.topic.accesspolicy,enable.kafka.quota.monitor,rocketmq.acl,roma_app_enable,support.kafka.producer.ip,enable.new.authinfo,enable.kafka.quota,rabbitmq_run_log_enable,max.ssl.connections,route,message_trace_v2_enable,kafka.config.dynamic.modify.enable,feature.physerver.kafka.topic.modify,enable.topic.quota,kafka.ssl.cert.modify.enable,roma.user.manage.no.support,auto.create.groups.enable,feature.physerver.kafka.pulbic.dynamic,kafka.config.static.modify.enable",
"disk_encrypted" : false,
"ces_version" : "linux,v1,v2,v3,v4",
"new_spec_billing_enable" : true,
"enable_acl" : false,
"namesrv_address" : "192.168.93.114:8100",
"broker_address" : "192.168.64.0/18:10100",
"public_namesrv_address" : "100.85.116.211:8200",
"public_broker_address" : "100.85.116.211:10101",
"grpc_address" : "192.168.93.114:8080",
"public_grpc_address" : "100.85.116.211:8081"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowInstanceSolution {

    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);
```

```
RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ShowInstanceRequest request = new ShowInstanceRequest();
request.withInstanceId("{instance_id}");
try {
    ShowInstanceResponse response = client.showInstance(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowInstanceRequest()
        request.instance_id = "{instance_id}"
        response = client.show_instance(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowInstanceRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowInstance(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         | Instance queried successfully. |

## Error Codes

See [Error Codes](#).

### 5.1.4 Deleting an Instance

#### Function

This API is used to delete an instance to release all the resources occupied by it.

## Calling Method

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

## URI

DELETE /v2/{project\_id}/instances/{instance\_id}

**Table 5-13** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

## Request Parameters

None

## Response Parameters

**Status code: 204**

Specified instance deleted successfully.

None

## Example Requests

Deleting an instance

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;
```

```
public class DeleteInstanceSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteInstanceRequest request = new DeleteInstanceRequest();
        request.withInstanceId("{instance_id}");
        try {
            DeleteInstanceResponse response = client.deleteInstance(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
```

```
request = DeleteInstanceRequest()
request.instance_id = "{instance_id}"
response = client.delete_instance(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteInstanceRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.DeleteInstance(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         | Specified instance deleted successfully. |



## Error Codes

See [Error Codes](#).

## 5.1.5 Modifying Instance Information

### Function

This API is used to modify the name and description of an instance.

### Calling Method

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

### URI

PUT /v2/{project\_id}/instances/{instance\_id}

**Table 5-14** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

**Table 5-15** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String | Instance name.<br>An instance name consists of 4 to 64 characters including letters, digits, and hyphens (-) and must start with a letter. |

| Parameter         | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                            |
|-------------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| description       | No        | String  | Description of an instance.<br>The description supports up to 1024 characters.<br><b>NOTE</b><br>The backslash ( \ ) and quotation mark ( " ) are special characters for JSON messages. When using these characters in a parameter value, add the escape character ( \ ) before the characters, for example, \ and " . |
| security_group_id | No        | String  | Security group ID.<br>To obtain it, log in to the VPC console and view the security group ID on the security group details page.                                                                                                                                                                                       |
| enable_acl        | No        | Boolean | ACL.                                                                                                                                                                                                                                                                                                                   |
| enable_publicip   | No        | Boolean | Whether to enable public access.                                                                                                                                                                                                                                                                                       |
| publicip_id       | No        | String  | ID of the EIP bound to the instance.<br>Use commas ( , ) to separate multiple EIP IDs.<br>This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ).                                                                                                            |

## Response Parameters

**Status code: 204**

Instance information modified successfully.

None

## Example Requests

Modifying the name and description of a RocketMQ instance

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}
```

```
{
  "name" : "rocketmq001",
  "description" : "RocketMQ description"
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying the name and description of a RocketMQ instance

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class UpdateInstanceSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateInstanceRequest request = new UpdateInstanceRequest();
        request.withInstanceId("{instance_id}");
        UpdateInstanceReq body = new UpdateInstanceReq();
        body.withDescription("RocketMQ description");
        body.withName("rocketmq001");
        request.withBody(body);
        try {
            UpdateInstanceResponse response = client.updateInstance(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

### Modifying the name and description of a RocketMQ instance

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateInstanceRequest()
        request.instance_id = "{instance_id}"
        request.body = UpdateInstanceReq(
            description="RocketMQ description",
            name="rocketmq001"
        )
        response = client.update_instance(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

### Modifying the name and description of a RocketMQ instance

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateInstanceRequest{
    request.InstanceId = "{instance_id}"
    descriptionUpdateInstanceReq:= "RocketMQ description"
    nameUpdateInstanceReq:= "rocketmq001"
    request.Body = &model.UpdateInstanceReq{
        Description: &descriptionUpdateInstanceReq,
        Name: &nameUpdateInstanceReq,
    }
    response, err := client.UpdateInstance(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         | Instance information modified successfully. |

## Error Codes

See [Error Codes](#).

## 5.1.6 Batch Deleting Instances

### Function

This API is used to delete instances in batches. **Data in the instances will be deleted without any backup. Exercise caution when performing this operation.**

### Calling Method

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

## URI

POST /v2/{project\_id}/instances/action

**Table 5-16** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                           |
|------------|-----------|--------|-----------------------------------------------------------------------|
| project_id | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-17** Request body parameters

| Parameter   | Mandatory | Type             | Description                                                                                                                    |
|-------------|-----------|------------------|--------------------------------------------------------------------------------------------------------------------------------|
| instances   | No        | Array of strings | List of instance IDs.                                                                                                          |
| action      | Yes       | String           | Operation to be performed on instances. Value: <b>delete</b> .                                                                 |
| all_failure | No        | String           | When set to <b>reliability</b> , this parameter indicates that all RocketMQ instances that fail to be created will be deleted. |

## Response Parameters

**Status code: 200**

**Table 5-18** Response body parameters

| Parameter | Type                                     | Description                      |
|-----------|------------------------------------------|----------------------------------|
| results   | Array of <a href="#">results</a> objects | Result of instance modification. |

**Table 5-19** results

| Parameter | Type   | Description       |
|-----------|--------|-------------------|
| result    | String | Operation result. |
| instance  | String | Instance ID.      |

**Status code: 204**

All RocketMQ instances that fail to be created are deleted successfully.

**Example Requests**

- Batch deleting RocketMQ instances

```
POST https://{endpoint}/v2/{project_id}/instances/action
```

```
{
  "action": "delete",
  "instances": [ "54602a9d-5e22-4239-9123-77e350df4a34", "7166cdea-
dbad-4d79-9610-7163e6f8b640" ]
}
```

- Deleting all RocketMQ instances that fail to be created

```
POST https://{endpoint}/v2/{project_id}/instances/action
```

```
{
  "action": "delete",
  "all_failure": "reliability"
}
```

**Example Responses****Status code: 200**

Instances deleted.

```
{
  "results": [ {
    "result": "success",
    "instance": "019cacb7-4ff0-4d3c-9f33-f5f7b7fdc0e6"
  } ]
}
```

**SDK Sample Code**

The SDK sample code is as follows.

**Java**

- Batch deleting RocketMQ instances

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class BatchDeleteInstancesSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR_REGION>"))
    .build();
BatchDeleteInstancesRequest request = new BatchDeleteInstancesRequest();
BatchDeleteInstanceReq body = new BatchDeleteInstanceReq();
List<String> listbodyInstances = new ArrayList<>();
listbodyInstances.add("54602a9d-5e22-4239-9123-77e350df4a34");
listbodyInstances.add("7166cdea-dbad-4d79-9610-7163e6f8b640");
body.withAction(BatchDeleteInstanceReq.ActionEnum.fromValue("delete"));
body.withInstances(listbodyInstances);
request.withBody(body);
try {
    BatchDeleteInstancesResponse response = client.batchDeleteInstances(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());
}
}
```

- Deleting all RocketMQ instances that fail to be created

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;
```

```
public class BatchDeleteInstancesSolution {
```

```
    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);
```



```
RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
BatchDeleteInstancesRequest request = new BatchDeleteInstancesRequest();
BatchDeleteInstanceReq body = new BatchDeleteInstanceReq();
body.withAllFailure(BatchDeleteInstanceReq.AllFailureEnum.fromValue("reliability"));
body.withAction(BatchDeleteInstanceReq.ActionEnum.fromValue("delete"));
request.withBody(body);
try {
    BatchDeleteInstancesResponse response = client.batchDeleteInstances(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

- Batch deleting RocketMQ instances

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteInstancesRequest()
        listInstancesbody = [
            "54602a9d-5e22-4239-9123-77e350df4a34",
            "7166cdea-dbad-4d79-9610-7163e6f8b640"
        ]
        request.body = BatchDeleteInstanceReq(
            action="delete",
            instances=listInstancesbody
        )
        response = client.batch_delete_instances(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

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

- Deleting all RocketMQ instances that fail to be created

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteInstancesRequest()
        request.body = BatchDeleteInstanceReq(
            all_failure="reliability",
            action="delete"
        )
        response = client.batch_delete_instances(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

- Batch deleting RocketMQ instances

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.BatchDeleteInstancesRequest{}
var listInstancesbody = []string{
    "54602a9d-5e22-4239-9123-77e350df4a34",
    "7166cdea-dbad-4d79-9610-7163e6f8b640",
}
request.Body = &model.BatchDeleteInstanceReq{
    Action: model.GetBatchDeleteInstanceReqActionEnum().DELETE,
    Instances: &listInstancesbody,
}
response, err := client.BatchDeleteInstances(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Deleting all RocketMQ instances that fail to be created

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteInstancesRequest{}
    allFailureBatchDeleteInstanceReq := model.GetBatchDeleteInstanceReqAllFailureEnum().RELIABILITY
    request.Body = &model.BatchDeleteInstanceReq{
        AllFailure: &allFailureBatchDeleteInstanceReq,
        Action: model.GetBatchDeleteInstanceReqActionEnum().DELETE,
    }
}
```

```
response, err := client.BatchDeleteInstances(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         | Instances deleted.                                                       |
| 204         | All RocketMQ instances that fail to be created are deleted successfully. |

## Error Codes

See [Error Codes](#).

## 5.1.7 Querying the Broker List

### Function

This API is used to query the list of brokers.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/brokers

**Table 5-20** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Request Parameters

None

## Response Parameters

**Status code: 200****Table 5-21** Response body parameters

| Parameter | Type   | Description                                                           |
|-----------|--------|-----------------------------------------------------------------------|
| total     | Number | <b>Parameter description:</b><br>Total.<br><b>Value range:</b><br>N/A |

| Parameter       | Type                            | Description                                                                                 |
|-----------------|---------------------------------|---------------------------------------------------------------------------------------------|
| next_offset     | Integer                         | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>N/A     |
| previous_offset | Integer                         | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>N/A |
| brokers         | Array of <b>brokers</b> objects | <b>Parameter description:</b><br>Broker list.                                               |

**Table 5-22** brokers

| Parameter   | Type             | Description                                                                           |
|-------------|------------------|---------------------------------------------------------------------------------------|
| ids         | Array of numbers | <b>Parameter description:</b><br>All broker IDs.                                      |
| broker_name | String           | Broker name.<br><b>Parameter description:</b><br>Total.<br><b>Value range:</b><br>N/A |

## Example Requests

Querying the broker list of a RocketMQ instance

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/brokers
```

## Example Responses

**Status code: 200**

RocketMQ brokers queried successfully.

```
{
  "total" : 1,
  "brokers" : [ {
    "ids" : [ 0, 1, 2 ],
    "broker_name" : "broker-0"
  } ],
  "next_offset" : -1,
  "previous_offset" : -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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListBrokersSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListBrokersRequest request = new ListBrokersRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListBrokersResponse response = client.listBrokers(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListBrokersRequest()
        request.instance_id = "{instance_id}"
        response = client.list_brokers(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBrokersRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListBrokers(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         | RocketMQ brokers queried successfully. |

## Error Codes

See [Error Codes](#).

# 5.1.8 Enabling Domain Name Access to a RocketMQ Instance

## Function

This API is used to enable domain name access to a RocketMQ instance.

## Calling Method

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

## URI

POST /v2/{project\_id}/rocketmq/instances/{instance\_id}/dns

**Table 5-23** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                  |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details about how to obtain it, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID, which can be obtained from <a href="#">Querying All Instances</a> .             |

## Request Parameters

None

## Response Parameters

**Status code: 204**

Successful

**Status code: 400**

**Table 5-24** Response body parameters

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

## Example Requests

Enabling domain name access to a RocketMQ instance

```
POST https://{endpoint}/v2/{project_id}/rocketmq/instances/{instance_id}/dns
```

## Example Responses

**Status code: 400**

Failed

```
{
  "error_code" : "DMS.111501035",
  "error_msg" : "dns already enabled"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class EnableDnsSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
EnableDnsRequest request = new EnableDnsRequest();
request.withInstanceId("{instance_id}");
try {
    EnableDnsResponse response = client.enableDns(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = EnableDnsRequest()
        request.instance_id = "{instance_id}"
        response = client.enable_dns(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.EnableDnsRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.EnableDns(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         | Successful  |
| 400         | Failed      |

## Error Codes

See [Error Codes](#).

## 5.2 Consumer Group Management

### 5.2.1 Querying the Consumer Group List

#### Function

This API is used to query the consumer group list.

#### Calling Method

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

#### URI

GET /v2/{project\_id}/instances/{instance\_id}/groups

**Table 5-25** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Table 5-26 Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                               |
|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| group     | No        | String  | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A         |
| limit     | No        | Integer | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>10   |
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>0 |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-27** Response body parameters

| Parameter       | Type                                           | Description                                                                                                             |
|-----------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| total           | Number                                         | <b>Parameter description:</b><br>Total number of consumer groups.<br><b>Value range:</b><br>N/A                         |
| groups          | Array of <a href="#">ConsumerGroup</a> objects | <b>Parameter description:</b><br>Consumer group list.                                                                   |
| max             | Integer                                        | <b>Parameter description:</b><br>Maximum number of consumer groups that can be created.<br><b>Value range:</b><br>N/A   |
| remaining       | Integer                                        | <b>Parameter description:</b><br>Remaining number of consumer groups that can be created.<br><b>Value range:</b><br>N/A |
| next_offset     | Integer                                        | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>N/A                                 |
| previous_offset | Integer                                        | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>N/A                             |

**Table 5-28** ConsumerGroup

| Parameter | Type    | Description                                                                                                                                                                           |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled   | Boolean | <b>Parameter description:</b><br>Whether consumption is allowed.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul> |

| Parameter       | Type             | Description                                                                                                                                                                                   |
|-----------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| broadcast       | Boolean          | <b>Parameter description:</b><br>Whether to broadcast.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul>                   |
| brokers         | Array of strings | <b>Parameter description:</b><br>List of associated brokers.                                                                                                                                  |
| name            | String           | <b>Parameter description:</b><br>Consumer group name.<br><b>Value range:</b><br>N/A                                                                                                           |
| group_desc      | String           | <b>Parameter description:</b><br>Consumer group description.<br><b>Value range:</b><br>N/A                                                                                                    |
| retry_max_time  | Integer          | <b>Parameter description:</b><br>Maximum number of retries.<br><b>Value range:</b><br>1–16                                                                                                    |
| createdAt       | Long             | <b>Parameter description:</b><br>Creation timestamp.<br><b>Value range:</b><br>N/A                                                                                                            |
| permissions     | Array of strings | <b>Parameter description:</b><br>Permission set.                                                                                                                                              |
| consume_orderly | Boolean          | <b>Parameter description:</b><br>Whether orderly consumption is enabled.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul> |

## Example Requests

Querying the consumer group list of a RocketMQ instance

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups
```



## Example Responses

### Status code: 200

Consumer groups queried successfully.

```
{
  "total" : 1,
  "groups" : [ {
    "name" : "group-1",
    "enabled" : true,
    "broadcast" : false,
    "brokers" : [ "broker-0" ],
    "createdAt" : 1709087952686,
    "permissions" : [ ],
    "retry_max_time" : 16,
    "consume_orderly" : false
  } ],
  "max" : 4000,
  "remaining" : 3999,
  "next_offset" : -1,
  "previous_offset" : -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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListInstanceConsumerGroupsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListInstanceConsumerGroupsRequest request = new ListInstanceConsumerGroupsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListInstanceConsumerGroupsResponse response = client.listInstanceConsumerGroups(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListInstanceConsumerGroupsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_instance_consumer_groups(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListInstanceConsumerGroupsRequest{}
request.InstanceId = "{instance_id}"
response, err := client.ListInstanceConsumerGroups(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         | Consumer groups queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.2.2 Creating a Consumer Group or Batch Deleting Consumer Groups

### Function

This API is used to create a consumer group or batch deleting consumer groups.

### Calling Method

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

URI

POST /v2/{project\_id}/instances/{instance\_id}/groups

Table 5-29 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-30** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                             |
|-----------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | No        | String | <b>Parameter description:</b><br>This parameter is used to delete consumer groups in batches. If it is not set, a consumer group will be created.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>delete:</b> Delete consumer groups in batches.</li></ul> <b>Default value:</b><br>N/A |

## Request Parameters

**Table 5-31** Request body parameters

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                         |
|-----------|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| groups    | No        | Array of strings | <b>Parameter description:</b><br>List of consumer groups to be deleted.                                                                                                                                                                                             |
| name      | No        | String           | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>Enter 3 to 64 characters. Use only letters, digits, percent (%), vertical bars ( ), hyphens (-), and underscores (_).<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| brokers   | No        | Array of strings | <b>Parameter description:</b><br>Associated brokers.<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 4.8.0 instances.                                                                                                                       |

| Parameter      | Mandatory | Type    | Description                                                                                                                                                                                                                                                                               |
|----------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| broadcast      | No        | Boolean | <b>Parameter description:</b><br>Whether to broadcast.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br><ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <b>Default value:</b><br>N/A                                              |
| retry_max_time | No        | Integer | <b>Parameter description:</b><br>Maximum number of retries<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–16<br><b>Default value:</b><br>N/A                                                                                                                                   |
| enabled        | No        | Boolean | Whether consumption is allowed.<br><b>Parameter description:</b><br>Whether consumption is allowed.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br><ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <b>Default value:</b><br>N/A |

| Parameter       | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                |
|-----------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| consume_orderly | No        | Boolean | <b>Parameter description:</b><br>Indicates whether to enable ordered consumption.<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 5.x instances.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul> <b>Default value:</b><br>N/A |
| group_desc      | No        | String  | <b>Parameter description:</b><br>Consumer group description.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>0–200<br><b>Default value:</b><br>N/A                                                                                                                                                                 |

Response Parameters

Status code: 200

Table 5-32 Response body parameters

| Parameter | Type   | Description                                                                                                           |
|-----------|--------|-----------------------------------------------------------------------------------------------------------------------|
| job_id    | String | <b>Parameter description:</b><br>ID of the job for deleting consumer groups.<br><b>Value range:</b><br>N/A            |
| name      | String | <b>Parameter description:</b><br>ID of the consumer group that is successfully created.<br><b>Value range:</b><br>N/A |

## Example Requests

- For RocketMQ 4.8.0 instances: Creating a consumer group with broadcast consumption disabled, associated with broker-0, and max. 16 retries.

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/groups

```
{
  "name": "consumer-group-test",
  "group_desc": "group_description",
  "brokers": [ "broker-0" ],
  "broadcast": false,
  "retry_max_time": 16
}
```

- For RocketMQ 5.x instances: Creating a consumer group with broadcast and orderly consumption disabled, and max. 16 retries

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/groups

```
{
  "name": "consumer-group-test",
  "group_desc": "group_description",
  "consume_orderly": false,
  "broadcast": false,
  "retry_max_time": 16
}
```

- Deleting consumer group consumer-group-test.

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/groups?action=delete

```
{
  "groups": [ "consumer-group-test" ]
}
```

## Example Responses

**Status code: 200**

A consumer group is created or multiple consumer groups are deleted in batches.

```
{
  "name": "consumer-group-test"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- For RocketMQ 4.8.0 instances: Creating a consumer group with broadcast consumption disabled, associated with broker-0, and max. 16 retries.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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



```
public class CreateConsumerGroupOrBatchDeleteConsumerGroupSolution {

    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);

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

        CreateConsumerGroupOrBatchDeleteConsumerGroupRequest request = new
        CreateConsumerGroupOrBatchDeleteConsumerGroupRequest();
        request.withInstanceId("{instance_id}");
        CreateConsumerGroupOrBatchDeleteConsumerGroupReq body = new
        CreateConsumerGroupOrBatchDeleteConsumerGroupReq();
        List<String> listbodyBrokers = new ArrayList<>();
        listbodyBrokers.add("broker-0");
        body.withGroupDesc("group_description");
        body.withName("consumer-group-test");
        body.withRetryMaxTime(16);
        body.withBrokers(listbodyBrokers);
        body.withBroadcast(false);
        request.withBody(body);
        try {
            CreateConsumerGroupOrBatchDeleteConsumerGroupResponse response =
            client.createConsumerGroupOrBatchDeleteConsumerGroup(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());
        }
    }
}
```

- For RocketMQ 5.x instances: Creating a consumer group with broadcast and orderly consumption disabled, and max. 16 retries

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class CreateConsumerGroupOrBatchDeleteConsumerGroupSolution {
```

```
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);

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

    CreateConsumerGroupOrBatchDeleteConsumerGroupRequest request = new
    CreateConsumerGroupOrBatchDeleteConsumerGroupRequest();
    request.withInstanceId("{instance_id}");
    CreateConsumerGroupOrBatchDeleteConsumerGroupReq body = new
    CreateConsumerGroupOrBatchDeleteConsumerGroupReq();
    body.withConsumeOrderly(false);
    body.withGroupDesc("group_description");
    body.withName("consumer-group-test");
    body.withRetryMaxTime(16);
    body.withBroadcast(false);
    request.withBody(body);
    try {
        CreateConsumerGroupOrBatchDeleteConsumerGroupResponse response =
        client.createConsumerGroupOrBatchDeleteConsumerGroup(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());
    }
}
```

- Deleting consumer group consumer-group-test.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class CreateConsumerGroupOrBatchDeleteConsumerGroupSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR_REGION>"))
    .build();
CreateConsumerGroupOrBatchDeleteConsumerGroupRequest request = new
CreateConsumerGroupOrBatchDeleteConsumerGroupRequest();
request.withInstanceId("{instance_id}");
CreateConsumerGroupOrBatchDeleteConsumerGroupReq body = new
CreateConsumerGroupOrBatchDeleteConsumerGroupReq();
List<String> listbodyGroups = new ArrayList<>();
listbodyGroups.add("consumer-group-test");
body.withGroups(listbodyGroups);
request.withBody(body);
try {
    CreateConsumerGroupOrBatchDeleteConsumerGroupResponse response =
client.createConsumerGroupOrBatchDeleteConsumerGroup(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

- For RocketMQ 4.8.0 instances: Creating a consumer group with broadcast consumption disabled, associated with broker-0, and max. 16 retries.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateConsumerGroupOrBatchDeleteConsumerGroupRequest()
    request.instance_id = "{instance_id}"
    listBrokersbody = [
        "broker-0"
    ]
    request.body = CreateConsumerGroupOrBatchDeleteConsumerGroupReq(
        group_desc="group_description",
        name="consumer-group-test",
        retry_max_time=16,
        brokers=listBrokersbody,
        broadcast=False
    )
    response = client.create_consumer_group_or_batch_delete_consumer_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- For RocketMQ 5.x instances: Creating a consumer group with broadcast and orderly consumption disabled, and max. 16 retries

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateConsumerGroupOrBatchDeleteConsumerGroupRequest()
        request.instance_id = "{instance_id}"
        request.body = CreateConsumerGroupOrBatchDeleteConsumerGroupReq(
            consume_orderly=False,
            group_desc="group_description",
            name="consumer-group-test",
            retry_max_time=16,
            broadcast=False
        )
        response = client.create_consumer_group_or_batch_delete_consumer_group(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

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

- Deleting consumer group consumer-group-test.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateConsumerGroupOrBatchDeleteConsumerGroupRequest()
        request.instance_id = "{instance_id}"
        listGroupsbody = [
            "consumer-group-test"
        ]
        request.body = CreateConsumerGroupOrBatchDeleteConsumerGroupReq(
            groups=listGroupsbody
        )
        response = client.create_consumer_group_or_batch_delete_consumer_group(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

- For RocketMQ 4.8.0 instances: Creating a consumer group with broadcast consumption disabled, associated with broker-0, and max. 16 retries.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateConsumerGroupOrBatchDeleteConsumerGroupRequest{
    request.InstanceId = "{instance_id}"
    var listBrokersbody = []string{
        "broker-0",
    }
    groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "group_description"
    nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "consumer-group-test"
    retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= int32(16)
    broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= false
    request.Body = &model.CreateConsumerGroupOrBatchDeleteConsumerGroupReq{
        GroupDesc: &groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        Name: &nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        RetryMaxTime: &retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        Brokers: &listBrokersbody,
        Broadcast: &broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
    }
    response, err := client.CreateConsumerGroupOrBatchDeleteConsumerGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- For RocketMQ 5.x instances: Creating a consumer group with broadcast and orderly consumption disabled, and max. 16 retries

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateConsumerGroupOrBatchDeleteConsumerGroupRequest{
        request.InstanceId = "{instance_id}"
        var listBrokersbody = []string{
            "broker-0",
        }
        groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "group_description"
        nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "consumer-group-test"
        retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= int32(16)
        broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= false
        request.Body = &model.CreateConsumerGroupOrBatchDeleteConsumerGroupReq{
            GroupDesc: &groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
            Name: &nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
            RetryMaxTime: &retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
            Brokers: &listBrokersbody,
            Broadcast: &broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        }
        response, err := client.CreateConsumerGroupOrBatchDeleteConsumerGroup(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
```

```
client := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateConsumerGroupOrBatchDeleteConsumerGroupRequest{
    request.InstanceId = "{instance_id}"
    consumeOrderlyCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= false
    groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "group_description"
    nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= "consumer-group-test"
    retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= int32(16)
    broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq:= false
    request.Body = &model.CreateConsumerGroupOrBatchDeleteConsumerGroupReq{
        ConsumeOrderly: &consumeOrderlyCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        GroupDesc: &groupDescCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        Name: &nameCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        RetryMaxTime: &retryMaxTimeCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
        Broadcast: &broadcastCreateConsumerGroupOrBatchDeleteConsumerGroupReq,
    }
}
response, err := client.CreateConsumerGroupOrBatchDeleteConsumerGroup(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Deleting consumer group consumer-group-test.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateConsumerGroupOrBatchDeleteConsumerGroupRequest{
        request.InstanceId = "{instance_id}"
        var listGroupsboby = []string{
            "consumer-group-test",
        }
        request.Body = &model.CreateConsumerGroupOrBatchDeleteConsumerGroupReq{
            Groups: &listGroupsboby,
```

```
}
response, err := client.CreateConsumerGroupOrBatchDeleteConsumerGroup(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         | A consumer group is created or multiple consumer groups are deleted in batches. |

## Error Codes

See [Error Codes](#).

## 5.2.3 Batch Modifying Consumer Groups

### Function

This API is used to modify consumer groups in batches.

### Calling Method

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

### URI

PUT /v2/{project\_id}/instances/{instance\_id}/groups

**Table 5-33** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |



## Request Parameters

**Table 5-34** Request body parameters

| Parameter | Mandatory | Type                                                      | Description          |
|-----------|-----------|-----------------------------------------------------------|----------------------|
| groups    | No        | Array of <a href="#">BatchUpdateConsumerGroup</a> objects | Consumer group list. |

**Table 5-35** BatchUpdateConsumerGroup

| Parameter       | Mandatory | Type    | Description                                                                                                                                |
|-----------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|
| name            | No        | String  | Consumer group name. Enter 3 to 64 characters. Use only letters, digits, percent (%), vertical bars ( ), hyphens (-), and underscores (_). |
| broadcast       | No        | Boolean | Whether to broadcast.                                                                                                                      |
| retry_max_time  | No        | Integer | Maximum number of retries. The value ranges from 1 to 16.                                                                                  |
| enabled         | No        | Boolean | Whether consumption is allowed.                                                                                                            |
| consume_orderly | No        | Boolean | Whether to enable orderly consumption (mandatory only for RocketMQ 5.x instances).                                                         |
| group_desc      | No        | String  | Consumer group description. 0 to 200 characters.                                                                                           |

## Response Parameters

**Status code: 200**

**Table 5-36** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Job ID.     |

## Example Requests

Batch modifying parameters of consumer groups, with max. retries of consumer-group-test changed to 16.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups

{
  "groups": [ {
    "name": "consumer-group-test",
    "enabled": true,
    "broadcast": false,
    "consume_orderly": false,
    "retry_max_time": 16
  } ]
}
```

## Example Responses

**Status code: 200**

Consumer groups modified successfully.

```
{
  "job_id": "8abfa7b27da211df017da340427b0979"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Batch modifying parameters of consumer groups, with max. retries of consumer-group-test changed to 16.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class BatchUpdateConsumerGroupSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
```

```
BatchUpdateConsumerGroupRequest request = new BatchUpdateConsumerGroupRequest();
request.withInstanceId("{instance_id}");
BatchUpdateConsumerGroupReq body = new BatchUpdateConsumerGroupReq();
List<BatchUpdateConsumerGroup> listbodyGroups = new ArrayList<>();
listbodyGroups.add(
    new BatchUpdateConsumerGroup()
        .withName("consumer-group-test")
        .withBroadcast(false)
        .withRetryMaxTime(16)
        .withEnabled(true)
        .withConsumeOrderly(false)
);
body.withGroups(listbodyGroups);
request.withBody(body);
try {
    BatchUpdateConsumerGroupResponse response = client.batchUpdateConsumerGroup(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

Batch modifying parameters of consumer groups, with max. retries of consumer-group-test changed to 16.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchUpdateConsumerGroupRequest()
        request.instance_id = "{instance_id}"
        listGroupsbody = [
            BatchUpdateConsumerGroup(
                name="consumer-group-test",
                broadcast=False,
                retry_max_time=16,
```

```
        enabled=True,
        consume_orderly=False
    )
]
request.body = BatchUpdateConsumerGroupReq(
    groups=listGroupsbody
)
response = client.batch_update_consumer_group(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

Batch modifying parameters of consumer groups, with max. retries of consumer-group-test changed to 16.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchUpdateConsumerGroupRequest{
        request.InstanceId = "{instance_id}"
        nameGroups:= "consumer-group-test"
        broadcastGroups:= false
        retryMaxTimeGroups:= int32(16)
        enabledGroups:= true
        consumeOrderlyGroups:= false
        var listGroupsbody = []model.BatchUpdateConsumerGroup{
            {
                Name: &nameGroups,
                Broadcast: &broadcastGroups,
                RetryMaxTime: &retryMaxTimeGroups,
                Enabled: &enabledGroups,
                ConsumeOrderly: &consumeOrderlyGroups,
            },
        }
        request.Body = &model.BatchUpdateConsumerGroupReq{
```

```
Groups: &listGroupbody,
}
response, err := client.BatchUpdateConsumerGroup(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         | Consumer groups modified successfully. |

## Error Codes

See [Error Codes](#).

## 5.2.4 Deleting a Consumer Group

### Function

This API is used to delete a specified consumer group.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/instances/{instance\_id}/groups/{group}

**Table 5-37** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| group       | Yes       | String | Consumer group name.                                                  |

## Request Parameters

None

## Response Parameters

**Status code: 204**

**Table 5-38** Response body parameters

| Parameter | Type   | Description                                |
|-----------|--------|--------------------------------------------|
| job_id    | String | ID of the specification modification task. |

## Example Requests

Deleting a specified consumer group

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups/{group}
```

## Example Responses

**Status code: 204**

The specified consumer group is deleted.

```
{
  "job_id" : "93b94287-728d-4bb1-a158-cb66cb0854e7"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class DeleteConsumerGroupSolution {

    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);

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

DeleteConsumerGroupRequest request = new DeleteConsumerGroupRequest();
request.withInstanceId("{instance_id}");
request.withGroup("{group}");
try {
    DeleteConsumerGroupResponse response = client.deleteConsumerGroup(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteConsumerGroupRequest()
        request.instance_id = "{instance_id}"
        request.group = "{group}"
        response = client.delete_consumer_group(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteConsumerGroupRequest{}
    request.InstanceId = "{instance_id}"
    request.Group = "{group}"
    response, err := client.DeleteConsumerGroup(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         | The specified consumer group is deleted. |

## Error Codes

See [Error Codes](#).



## 5.2.5 Querying a Consumer Group

### Function

This API is used to query details about a specified consumer group.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/groups/{group}

**Table 5-39** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| group       | Yes       | String | Consumer group name.                                                  |

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-40** Response body parameters

| Parameter      | Type             | Description                     |
|----------------|------------------|---------------------------------|
| enabled        | Boolean          | Whether consumption is allowed. |
| broadcast      | Boolean          | Whether to broadcast.           |
| brokers        | Array of strings | List of associated brokers.     |
| name           | String           | Consumer group name.            |
| group_desc     | String           | Consumer group description.     |
| retry_max_time | Integer          | Maximum number of retries.      |
| app_id         | String           | Application ID.                 |
| app_name       | String           | Application name.               |

| Parameter   | Type             | Description |
|-------------|------------------|-------------|
| permissions | Array of strings | Permission. |

## Example Requests

Querying details about a specified consumer group

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups/{group}
```

## Example Responses

**Status code: 200**

Consumer group queried successfully.

```
{
  "name" : "test",
  "enabled" : true,
  "broadcast" : true,
  "brokers" : [ "broker-0" ],
  "permissions" : [ ],
  "retry_max_time" : 10,
  "app_id" : null,
  "app_name" : null
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowGroupSolution {

    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);
```

```
RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ShowGroupRequest request = new ShowGroupRequest();
request.withInstanceId("{instance_id}");
request.withGroup("{group}");
try {
    ShowGroupResponse response = client.showGroup(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowGroupRequest()
        request.instance_id = "{instance_id}"
        request.group = "{group}"
        response = client.show_group(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"
rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowGroupRequest{}
    request.InstanceId = "{instance_id}"
    request.Group = "{group}"
    response, err := client.ShowGroup(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         | Consumer group queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.2.6 Modifying a Consumer Group

### Function

This API is used to modify parameters of a specified consumer group.

## Calling Method

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

## URI

PUT /v2/{project\_id}/instances/{instance\_id}/groups/{group}

**Table 5-41** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| group       | Yes       | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                      |

## Request Parameters

**Table 5-42** Request body parameters

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                            |
|-----------|-----------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled   | Yes       | Boolean          | <b>Parameter description:</b><br>Whether a message can be consumed.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <b>Default value:</b><br>N/A |
| broadcast | Yes       | Boolean          | <b>Parameter description:</b><br>Whether to broadcast.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <b>Default value:</b><br>N/A              |
| brokers   | No        | Array of strings | <b>Parameter description:</b><br>List of associated brokers.                                                                                                                                                                                           |
| name      | No        | String           | <b>Parameter description:</b><br>Consumer group whose parameters are to be modified. (The consumer group name cannot be modified.)<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                         |

| Parameter      | Mandatory | Type    | Description                                                                                                                                              |
|----------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| retry_max_time | Yes       | Integer | <b>Parameter description:</b><br>Maximum number of retries.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–16<br><b>Default value:</b><br>N/A |

## Response Parameters

**Status code: 204**

**Table 5-43** Response body parameters

| Parameter | Type   | Description                                                                                               |
|-----------|--------|-----------------------------------------------------------------------------------------------------------|
| job_id    | String | <b>Parameter description:</b><br>ID of the specification modification task.<br><b>Value range:</b><br>N/A |

## Example Requests

Changing consumer-group-test's max. retries to 16

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups/{group}
{
  "name" : "consumer-group-test",
  "enabled" : true,
  "retry_max_time" : 16,
  "broadcast" : true
}
```

## Example Responses

**Status code: 204**

The specified consumer group is modified.

```
{
  "job_id" : "93b94287-728d-4bb1-a158-cb66cb0854e7"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Changing consumer-group-test's max. retries to 16

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class UpdateConsumerGroupSolution {

    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);

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

        UpdateConsumerGroupRequest request = new UpdateConsumerGroupRequest();
        request.withInstanceId("{instance_id}");
        request.withGroup("{group}");
        UpdateConsumerGroup body = new UpdateConsumerGroup();
        body.withRetryMaxTime(16);
        body.withName("consumer-group-test");
        body.withBroadcast(true);
        body.withEnabled(true);
        request.withBody(body);
        try {
            UpdateConsumerGroupResponse response = client.updateConsumerGroup(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

### Changing consumer-group-test's max. retries to 16

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateConsumerGroupRequest()
        request.instance_id = "{instance_id}"
        request.group = "{group}"
        request.body = UpdateConsumerGroup(
            retry_max_time=16,
            name="consumer-group-test",
            broadcast=True,
            enabled=True
        )
        response = client.update_consumer_group(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 consumer-group-test's max. retries to 16

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateConsumerGroupRequest{}
request.InstanceId = "{instance_id}"
request.Group = "{group}"
nameUpdateConsumerGroup:= "consumer-group-test"
request.Body = &model.UpdateConsumerGroup{
    RetryMaxTime: int32(16),
    Name: &nameUpdateConsumerGroup,
    Broadcast: true,
    Enabled: true,
}
response, err := client.UpdateConsumerGroup(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         | The specified consumer group is modified. |

## Error Codes

See [Error Codes](#).

## 5.2.7 Querying the Consumer Group List or Details

### Function

This API is used to query the consumer group list or details.

### Calling Method

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

URI

GET /v2/{project\_id}/instances/{instance\_id}/groups/{group}/topics

Table 5-44 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| group       | Yes       | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                      |

Table 5-45 Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                               |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topic     | No        | String  | <b>Parameter description:</b><br>Topic to be queried. If this parameter is not specified, the entire topic list is queried. If this parameter is specified, details of the topic are queried.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| limit     | No        | Integer | <b>Parameter description:</b><br>Maximum number of topics that can be returned in a query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>10                                                                                                    |
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>0                                                                                                                                 |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-46** Response body parameters

| Parameter       | Type                            | Description                                                                                                                                                        |
|-----------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topics          | Array of strings                | <b>Parameter description:</b><br>Topic list. This parameter is displayed only when you query the topic consumption list.                                           |
| total           | Integer                         | <b>Parameter description:</b><br>Total number of topics. This parameter is displayed only when you query the topic consumption list.<br><b>Value range:</b><br>N/A |
| lag             | Long                            | <b>Parameter description:</b><br>Total number of accumulated messages.<br><b>Value range:</b><br>N/A                                                               |
| max_offset      | Long                            | <b>Parameter description:</b><br>Total number of messages.<br><b>Value range:</b><br>N/A                                                                           |
| consumer_offset | Long                            | <b>Parameter description:</b><br>Number of consumed messages.<br><b>Value range:</b><br>N/A                                                                        |
| brokers         | Array of <b>Brokers</b> objects | <b>Parameter description:</b><br>Associated brokers of topics. This parameter is displayed only when you query the topic consumption details.                      |

**Table 5-47** Brokers

| Parameter   | Type   | Description                                                                                     |
|-------------|--------|-------------------------------------------------------------------------------------------------|
| broker_name | String | <b>Parameter description:</b><br>Names of the associated brokers.<br><b>Value range:</b><br>N/A |

| Parameter | Type                                   | Description                                                               |
|-----------|----------------------------------------|---------------------------------------------------------------------------|
| queues    | Array of <a href="#">Queue</a> objects | <b>Parameter description:</b><br>Queue details of the associated brokers. |

**Table 5-48** Queue

| Parameter         | Type    | Description                                                                                                                             |
|-------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------|
| id                | Integer | <b>Parameter description:</b><br>Queue ID.<br><b>Value range:</b><br>N/A                                                                |
| lag               | Long    | <b>Parameter description:</b><br>Total number of accumulated messages in the queue.<br><b>Value range:</b><br>N/A                       |
| broker_offset     | Long    | <b>Parameter description:</b><br>Total number of messages in the queue.<br><b>Value range:</b><br>N/A                                   |
| consumer_offset   | Long    | <b>Parameter description:</b><br>Number of consumed messages.<br><b>Value range:</b><br>N/A                                             |
| last_message_time | Long    | <b>Parameter description:</b><br>Time (UNIX, in millisecond) when the latest consumed message was stored.<br><b>Value range:</b><br>N/A |

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups/{group}/topics?topic=test0001
```

## Example Responses

**Status code: 200**

Consumer group list or details queried successfully.

- Successful

```
{
  "topics" : [ "topic-test" ],
  "total" : 1
}
```

- Consumer group details are queried successfully.

```
{
  "lag" : 0,
  "max_offset" : 1,
  "consumer_offset" : 1,
  "brokers" : [ {
    "broker_name" : "broker-0",
    "queues" : [ {
      "id" : 0,
      "lag" : 0,
      "broker_offset" : 0,
      "consumer_offset" : 0,
      "last_message_time" : 0
    }, {
      "id" : 1,
      "lag" : 0,
      "broker_offset" : 1,
      "consumer_offset" : 1,
      "last_message_time" : 1679398537088
    }, {
      "id" : 0,
      "lag" : 0,
      "broker_offset" : 0,
      "consumer_offset" : 0,
      "last_message_time" : 0
    } ]
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowConsumerListOrDetailsSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ShowConsumerListOrDetailsRequest request = new ShowConsumerListOrDetailsRequest();
request.withInstanceId("{instance_id}");
request.withGroup("{group}");
try {
    ShowConsumerListOrDetailsResponse response = client.showConsumerListOrDetails(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowConsumerListOrDetailsRequest()
        request.instance_id = "{instance_id}"
        request.group = "{group}"
        response = client.show_consumer_list_or_details(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowConsumerListOrDetailsRequest{}
    request.InstanceId = "{instance_id}"
    request.Group = "{group}"
    response, err := client.ShowConsumerListOrDetails(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         | Consumer group list or details queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.2.8 Resetting the Consumer Offset

### Function

This API is used to reset the consumer offset.

### Calling Method

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

### URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/groups/{group\_id}/reset-message-offset

**Table 5-49** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                        |
|------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine     | Yes       | String | <b>Parameter description:</b><br>Engine type.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br><ul style="list-style-type: none"><li>reliability</li></ul> <b>Default value:</b><br>N/A     |
| project_id | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| group_id    | Yes       | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                      |

Request Parameters

Table 5-50 Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                     |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| topic     | Yes       | String | <b>Parameter description:</b><br>Topic to be reset.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type   | Description                                                                                                                              |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| timestamp | Yes       | String | <b>Parameter description:</b><br>Reset time.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Response Parameters

Status code: 200

Table 5-51 Response body parameters

| Parameter | Type                                    | Description                                          |
|-----------|-----------------------------------------|------------------------------------------------------|
| queues    | Array of <a href="#">queues</a> objects | <b>Parameter description:</b><br>Queues to be reset. |

Table 5-52 queues

| Parameter   | Type   | Description                                                                                                                                                     |
|-------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| broker_name | String | <b>Parameter description:</b><br>Broker where the queue is located.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter        | Type    | Description                                                                                                                                 |
|------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------|
| queue_id         | Integer | <b>Parameter description:</b><br>Queue ID.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A      |
| timestamp_offset | Long    | <b>Parameter description:</b><br>Target offset.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Example Requests

Resetting consumer offset of topic\_01 to a specified time point.

```
POST https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/groups/{group_id}/reset-message-offset
{
  "topic": "topic_01",
  "timestamp": 1662652800000
}
```

## Example Responses

**Status code: 200**

Consumer offset reset.

```
{
  "queues": [ {
    "broker_name": "broker-1",
    "queue_id": 0,
    "timestamp_offset": 0
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

## Java

Resetting consumer offset of topic\_01 to a specified time point

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ResetConsumeOffsetSolution {

    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);

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

        ResetConsumeOffsetRequest request = new ResetConsumeOffsetRequest();
        request.withEngine(ResetConsumeOffsetRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        request.withGroupId("{group_id}");
        ResetConsumeOffsetReq body = new ResetConsumeOffsetReq();
        body.withTimestamp("1662652800000");
        body.withTopic("topic_01");
        request.withBody(body);
        try {
            ResetConsumeOffsetResponse response = client.resetConsumeOffset(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

Resetting consumer offset of topic\_01 to a specified time point

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ResetConsumeOffsetRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        request.group_id = "{group_id}"
        request.body = ResetConsumeOffsetReq(
            timestamp="1662652800000",
            topic="topic_01"
        )
        response = client.reset_consume_offset(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

### Resetting consumer offset of topic\_01 to a specified time point

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
    rocketmq.RocketMQClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.ResetConsumeOffsetRequest{  
    request.Engine = model.GetResetConsumeOffsetRequestEngineEnum().ENGINE  
    request.InstanceId = "{instance_id}"  
    request.GroupId = "{group_id}"  
    request.Body = &model.ResetConsumeOffsetReq{  
        Timestamp: "1662652800000",  
        Topic: "topic_01",  
    }  
}  
response, err := client.ResetConsumeOffset(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         | Consumer offset reset. |

## Error Codes

See [Error Codes](#).

## 5.2.9 Querying the Consumer List

### Function

This API is used to query the consumer list of a consumer group.

### Calling Method

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

### URI

GET /v2/rocketmq/{project\_id}/instances/{instance\_id}/groups/{group}/clients



Table 5-53 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| group       | Yes       | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                      |

Table 5-54 Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                             |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>N/A                                                                                                                                               |
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset, which is the position where the query starts. The value must be greater than or equal to 0.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                        |
| is_detail | No        | Boolean | <b>Parameter description:</b><br>Indicates whether to query the consumer details. The value <b>true</b> indicates that the detailed consumer list is queried. Otherwise, a simple consumer list is queried.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-55** Response body parameters

| Parameter                | Type                                        | Description                            |
|--------------------------|---------------------------------------------|----------------------------------------|
| group_name               | String                                      | Consumer group name.                   |
| online                   | Boolean                                     | Whether the consumer group is online.  |
| subscription_consistency | Boolean                                     | Whether subscriptions are consistent.  |
| total                    | Integer                                     | Total number of consumers.             |
| next_offset              | Integer                                     | Offset of the next page.               |
| previous_offset          | Integer                                     | Offset of the previous page.           |
| clients                  | Array of <a href="#">ClientData</a> objects | List of consumer subscription details. |

**Table 5-56** ClientData

| Parameter     | Type                                          | Description        |
|---------------|-----------------------------------------------|--------------------|
| language      | String                                        | Client language.   |
| version       | String                                        | Client version.    |
| client_id     | String                                        | Client ID.         |
| client_addr   | String                                        | Client address.    |
| subscriptions | Array of <a href="#">Subscription</a> objects | Subscription list. |

**Table 5-57** Subscription

| Parameter  | Type   | Description                                                      |
|------------|--------|------------------------------------------------------------------|
| topic      | String | Name of the subscribed topic.                                    |
| type       | String | Subscription type. The options are <b>TAG</b> and <b>SQL92</b> . |
| expression | String | Subscription tag.                                                |

## Example Requests

Querying a list of 10 consumers of a specified consumer group from offset=0

```
GET https://{endpoint}/v2/rocketmq/{project_id}/instances/{instance_id}/groups/{group}/clients?
offset=0&limit=10&is_detail=true
```

## Example Responses

**Status code: 200**

Consumer subscription details queried.

```
{
  "group_name" : "test",
  "online" : true,
  "subscription_consistency" : true,
  "total" : 1,
  "next_offset" : -1,
  "previous_offset" : -1,
  "clients" : [ {
    "client_id" : "192.168.0.1@consumer1",
    "language" : "JAVA",
    "version" : "V4_8_0",
    "client_addr" : "192.168.0.1:65233",
    "subscriptions" : [ {
      "topic" : "topicA",
      "type" : "TAG",
      "expression" : "tagA"
    } ]
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowConsumerConnectionsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
```

```
        .build();
        ShowConsumerConnectionsRequest request = new ShowConsumerConnectionsRequest();
        request.withInstanceId("{instance_id}");
        request.withGroup("{group}");
        try {
            ShowConsumerConnectionsResponse response = client.showConsumerConnections(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowConsumerConnectionsRequest()
        request.instance_id = "{instance_id}"
        request.group = "{group}"
        response = client.show_consumer_connections(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowConsumerConnectionsRequest{}
    request.InstanceId = "{instance_id}"
    request.Group = "{group}"
    response, err := client.ShowConsumerConnections(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         | Consumer subscription details queried. |

## Error Codes

See [Error Codes](#).

# 5.3 Topic Management

### 5.3.1 Creating a Topic or Deleting Topics in Batches

#### Function

This API is used to create a topic or delete topics in batches.

#### Calling Method

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

#### URI

POST /v2/{project\_id}/instances/{instance\_id}/topics

**Table 5-58** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-59** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                            |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | No        | String | <b>Parameter description:</b><br>This parameter is used to delete topics in batches. If it is not set, a topic will be created.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>delete:</b> Delete consumer groups in batches.</li><li>• <b>Do not fill:</b> Create consumer groups in batches.</li></ul> <b>Default value:</b><br>N/A |

## Request Parameters

**Table 5-60** Request body parameters

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                |
|-----------|-----------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String           | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>Enter 3 to 64 characters. Use only letters, digits, percent (%), vertical bars ( ), hyphens (-), and underscores (_).<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| brokers   | No        | Array of strings | <b>Parameter description:</b><br>Associated broker.<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 4.8.0 instances.                                                                                                               |



| Parameter  | Mandatory | Type                                    | Description                                                                                                                                                                                                                                                                                                                                      |
|------------|-----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| queue_num  | No        | Number                                  | <b>Parameter description:</b><br>Total number of queues.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>N/A                                                                                                                                                                                            |
| queues     | No        | Array of <a href="#">queues</a> objects | <b>Parameter description:</b><br>Queue.<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 4.8.0 instances.                                                                                                                                                                                                                 |
| permission | No        | String                                  | <b>Parameter description:</b><br>Permission.<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 4.8.0 instances.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>pub</b> (publish)</li> <li>• <b>sub</b> (subscribe)</li> <li>• <b>all</b> (publish + subscribe)</li> </ul> <b>Default value:</b><br>N/A |

| Parameter    | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|-----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| message_type | No        | String           | <b>Parameter description:</b><br>Message type<br><b>Constraints:</b><br>This parameter is mandatory only for RocketMQ 5.x instances.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>NORMAL</b> (normal messages)</li> <li>• <b>FIFO</b> (ordered messages)</li> <li>• <b>DELAY</b> (scheduled messages)</li> <li>• <b>TRANSACTION</b> (transactional messages)</li> </ul> <b>Default value:</b><br>N/A |
| topics       | No        | Array of strings | Topic list. This parameter is used when topics are deleted in batches.<br><b>Parameter description:</b><br>Topic list. This parameter is used when topics are deleted in batches.                                                                                                                                                                                                                                          |

**Table 5-61** queues

| Parameter | Mandatory | Type   | Description                                                                                                                                      |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| broker    | No        | String | <b>Parameter description:</b><br>Associated brokers.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type   | Description                                                                                                                                     |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| queue_num | No        | Number | <b>Parameter description:</b><br>Number of queues.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>N/A |

## Response Parameters

Status code: 200

Table 5-62 Response body parameters

| Parameter | Type   | Description                                                                                                               |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------|
| id        | String | Topic name.<br><b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                                 |
| job_id    | String | Job ID for deleting topics.<br><b>Parameter description:</b><br>Job ID for deleting topics.<br><b>Value range:</b><br>N/A |

## Example Requests

- For RocketMQ 4.8.0 instances: Creating a topic associated with broker-0 with 3 queues

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics
```

```
{
  "name": "topic-test",
  "permission": "all",
  "queues": [ {
    "broker": "broker-0",
    "queue_num": 3
  } ]
}
```

- For RocketMQ 5.x instances: Creating a topic for normal messages

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics
```

```
{
  "name": "topic-test",
  "message_type": "NORMAL"
}
```

## Example Responses

**Status code: 200**

A topic is created or multiple topics are deleted in batches.

```
{
  "id": "topic-test"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- For RocketMQ 4.8.0 instances: Creating a topic associated with broker-0 with 3 queues

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class CreateTopicOrBatchDeleteTopicSolution {

    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);

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

        CreateTopicOrBatchDeleteTopicRequest request = new CreateTopicOrBatchDeleteTopicRequest();
        request.withInstanceId("{instance_id}");
        CreateTopicOrBatchDeleteTopicReq body = new CreateTopicOrBatchDeleteTopicReq();
        List<CreateTopicReqQueues> listbodyQueues = new ArrayList<>();
        listbodyQueues.add(
            new CreateTopicReqQueues()
                .withBroker("broker-0")
        );
    }
}
```

```
        .withQueueNum(java.math.BigDecimal.valueOf(3))
    );
    body.withPermission(CreateTopicOrBatchDeleteTopicReq.PermissionEnum.fromValue("all"));
    body.withName("topic-test");
    body.withQueues(listbodyQueues);
    request.withBody(body);
    try {
        CreateTopicOrBatchDeleteTopicResponse response =
client.createTopicOrBatchDeleteTopic(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());
    }
    }
}
```

- For RocketMQ 5.x instances: Creating a topic for normal messages

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class CreateTopicOrBatchDeleteTopicSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR_REGION>"))
            .build();
        CreateTopicOrBatchDeleteTopicRequest request = new CreateTopicOrBatchDeleteTopicRequest();
        request.withInstanceId("{instance_id}");
        CreateTopicOrBatchDeleteTopicReq body = new CreateTopicOrBatchDeleteTopicReq();

        body.withMessageType(CreateTopicOrBatchDeleteTopicReq.MessageTypeEnum.fromValue("NORMAL"));
        body.withName("topic-test");
        request.withBody(body);
        try {
            CreateTopicOrBatchDeleteTopicResponse response =
client.createTopicOrBatchDeleteTopic(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

- For RocketMQ 4.8.0 instances: Creating a topic associated with broker-0 with 3 queues

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateTopicOrBatchDeleteTopicRequest()
        request.instance_id = "{instance_id}"
        listQueuesbody = [
            CreateTopicReqQueues(
                broker="broker-0",
                queue_num=3
            )
        ]
        request.body = CreateTopicOrBatchDeleteTopicReq(
            permission="all",
            name="topic-test",
            queues=listQueuesbody
        )
        response = client.create_topic_or_batch_delete_topic(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- For RocketMQ 5.x instances: Creating a topic for normal messages

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateTopicOrBatchDeleteTopicRequest()
        request.instance_id = "{instance_id}"
        request.body = CreateTopicOrBatchDeleteTopicReq(
            message_type="NORMAL",
            name="topic-test"
        )
        response = client.create_topic_or_batch_delete_topic(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

- For RocketMQ 4.8.0 instances: Creating a topic associated with broker-0 with 3 queues

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateTopicOrBatchDeleteTopicRequest{}
request.InstanceId = "{instance_id}"
brokerQueues := "broker-0"
queueNumQueues := float32(3)
var listQueuesbody = []model.CreateTopicReqQueues{
    {
        Broker: &brokerQueues,
        QueueNum: &queueNumQueues,
    },
}
permissionCreateTopicOrBatchDeleteTopicReq :=
model.GetCreateTopicOrBatchDeleteTopicReqPermissionEnum().ALL
nameCreateTopicOrBatchDeleteTopicReq := "topic-test"
request.Body = &model.CreateTopicOrBatchDeleteTopicReq{
    Permission: &permissionCreateTopicOrBatchDeleteTopicReq,
    Name: &nameCreateTopicOrBatchDeleteTopicReq,
    Queues: &listQueuesbody,
}
response, err := client.CreateTopicOrBatchDeleteTopic(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- For RocketMQ 5.x instances: Creating a topic for normal messages

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```



```
request := &model.CreateTopicOrBatchDeleteTopicRequest{}
request.InstanceId = "{instance_id}"
messageTypeCreateTopicOrBatchDeleteTopicReq:=
model.GetCreateTopicOrBatchDeleteTopicReqMessageTypeEnum().NORMAL
nameCreateTopicOrBatchDeleteTopicReq:= "topic-test"
request.Body = &model.CreateTopicOrBatchDeleteTopicReq{
    MessageType: &messageTypeCreateTopicOrBatchDeleteTopicReq,
    Name: &nameCreateTopicOrBatchDeleteTopicReq,
}
response, err := client.CreateTopicOrBatchDeleteTopic(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         | A topic is created or multiple topics are deleted in batches. |

## Error Codes

See [Error Codes](#).

## 5.3.2 Querying the Topic List

### Function

This API is used to query the topic list of a RocketMQ instance.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/topics

**Table 5-63** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-64** Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                               |
|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type    | Description                                                                                                                                                 |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>N/A |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-65 Response body parameters

| Parameter   | Type    | Description                                                                                                    |
|-------------|---------|----------------------------------------------------------------------------------------------------------------|
| total       | Integer | <b>Parameter description:</b><br>Total number of topics.<br><b>Value range:</b><br>N/A                         |
| max         | Integer | <b>Parameter description:</b><br>Maximum number of topics that can be created.<br><b>Value range:</b><br>N/A   |
| remaining   | Integer | <b>Parameter description:</b><br>Remaining number of topics that can be created.<br><b>Value range:</b><br>N/A |
| next_offset | Integer | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>N/A                        |

| Parameter       | Type                          | Description                                                                                 |
|-----------------|-------------------------------|---------------------------------------------------------------------------------------------|
| previous_offset | Integer                       | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>N/A |
| topics          | Array of <b>Topic</b> objects | <b>Parameter description:</b><br>Remaining number of topics that can be created.            |

**Table 5-66** Topic

| Parameter             | Type                            | Description                                                                                                                                                                                                                                                      |
|-----------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                  | String                          | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                                                                                                                                                                                       |
| total_read_queue_num  | Number                          | <b>Parameter description:</b><br>Total number of read queues.<br><b>Value range:</b><br>N/A                                                                                                                                                                      |
| total_write_queue_num | Number                          | <b>Parameter description:</b><br>Total number of write queues.<br><b>Value range:</b><br>N/A                                                                                                                                                                     |
| permission            | String                          | <b>Parameter description:</b><br>Permission.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>sub</b>: subscribe permissions.</li> <li>• <b>pub</b>: publish permissions.</li> <li>• <b>all</b>: subscribe and publish permissions.</li> </ul> |
| brokers               | Array of <b>brokers</b> objects | Associated brokers.                                                                                                                                                                                                                                              |

| Parameter    | Type   | Description                                                                                                                                                                                                                                                                                                                                    |
|--------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| message_type | String | <b>Parameter description:</b><br>Message type (available only for RocketMQ 5.x instances).<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>NORMAL</b>: normal messages.</li><li>• <b>FIFO</b>: ordered messages.</li><li>• <b>DELAY</b>: scheduled messages.</li><li>• <b>TRANSACTION</b>: transactional messages.</li></ul> |

Table 5-67 brokers

| Parameter       | Type   | Description                                                                            |
|-----------------|--------|----------------------------------------------------------------------------------------|
| broker_name     | String | <b>Parameter description:</b><br>Broker name.<br><b>Value range:</b><br>N/A            |
| read_queue_num  | Number | <b>Parameter description:</b><br>Number of read queues.<br><b>Value range:</b><br>N/A  |
| write_queue_num | Number | <b>Parameter description:</b><br>Number of write queues.<br><b>Value range:</b><br>N/A |

## Example Requests

Querying a list of 10 topics of a specified RocketMQ instance from offset=0

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics?offset=0&limit=10
```

## Example Responses

**Status code: 200**

Query succeeded.

```
{  
  "total": "3",  
  "max": "2000",  
  "remaining": "1997",  
  "next_offset": "-1",
```

```
"previous_offset" : "-1",
"topics" : [ {
  "name" : "topic-1",
  "total_read_queue_num" : 3,
  "total_write_queue_num" : 3,
  "permission" : "all",
  "brokers" : [ {
    "broker_name" : "broker-0",
    "read_queue_num" : 3,
    "write_queue_num" : 3
  } ],
  "message_type" : "NORMAL"
}, {
  "name" : "topic-2",
  "total_read_queue_num" : 3,
  "total_write_queue_num" : 3,
  "permission" : "all",
  "brokers" : [ {
    "broker_name" : "broker-0",
    "read_queue_num" : 3,
    "write_queue_num" : 3
  } ],
  "message_type" : "NORMAL"
}, {
  "name" : "topic-3",
  "total_read_queue_num" : 3,
  "total_write_queue_num" : 3,
  "permission" : "all",
  "brokers" : [ {
    "broker_name" : "broker-0",
    "read_queue_num" : 3,
    "write_queue_num" : 3
  } ],
  "message_type" : "NORMAL"
} ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListRocketInstanceTopicsSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ListRocketInstanceTopicsRequest request = new ListRocketInstanceTopicsRequest();
request.withInstanceId("{instance_id}");
try {
    ListRocketInstanceTopicsResponse response = client.listRocketInstanceTopics(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListRocketInstanceTopicsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_rocket_instance_topics(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"  
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
        rocketmq.RocketMQClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ListRocketInstanceTopicsRequest{}  
    request.InstanceId = "{instance_id}"  
    response, err := client.ListRocketInstanceTopics(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         | Query succeeded. |

## Error Codes

See [Error Codes](#).

### 5.3.3 Deleting a Topic

#### Function

This API is used to delete a specified topic.



## Calling Method

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

## URI

DELETE /v2/{project\_id}/instances/{instance\_id}/topics/{topic}

**Table 5-68** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| topic       | Yes       | String | Topic name.                                                           |

## Request Parameters

None

## Response Parameters

**Status code: 204**

**Table 5-69** Response body parameters

| Parameter | Type   | Description                                |
|-----------|--------|--------------------------------------------|
| job_id    | String | ID of the specification modification task. |

## Example Requests

Deleting a specified topic

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics/{topic}
```

## Example Responses

**Status code: 204**

The specified topic is deleted.

```
{
  "job_id" : "93b94287-728d-4bb1-a158-cb66cb0854e7"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class DeleteTopicSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteTopicRequest request = new DeleteTopicRequest();
        request.withInstanceId("{instance_id}");
        request.withTopic("{topic}");
        try {
            DeleteTopicResponse response = client.deleteTopic(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = DeleteTopicRequest()
    request.instance_id = "{instance_id}"
    request.topic = "{topic}"
    response = client.delete_topic(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTopicRequest{}
    request.InstanceId = "{instance_id}"
    request.Topic = "{topic}"
    response, err := client.DeleteTopic(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         | The specified topic is deleted. |

## Error Codes

See [Error Codes](#).

## 5.3.4 Querying a Topic

### Function

This API is used to query a topic.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/topics/{topic}

**Table 5-70** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                        |
|------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| topic       | Yes       | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                               |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-71 Response body parameters

| Parameter            | Type   | Description                                                                                 |
|----------------------|--------|---------------------------------------------------------------------------------------------|
| name                 | String | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                  |
| total_read_queue_num | Number | <b>Parameter description:</b><br>Total number of read queues.<br><b>Value range:</b><br>N/A |

| Parameter             | Type                            | Description                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| total_write_queue_num | Number                          | <b>Parameter description:</b><br>Total number of write queues.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                                   |
| permission            | String                          | <b>Parameter description:</b><br>Permission.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>sub</b>: subscribe permissions.</li><li>• <b>pub</b>: publish permissions.</li><li>• <b>all</b>: subscribe and publish permissions.</li></ul>                                                                                   |
| brokers               | Array of <b>brokers</b> objects | Associated brokers.                                                                                                                                                                                                                                                                                                                            |
| message_type          | String                          | <b>Parameter description:</b><br>Message type (available only for RocketMQ 5.x instances).<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>NORMAL</b>: normal messages.</li><li>• <b>FIFO</b>: ordered messages.</li><li>• <b>DELAY</b>: scheduled messages.</li><li>• <b>TRANSACTION</b>: transactional messages.</li></ul> |

**Table 5-72** brokers

| Parameter      | Type   | Description                                                                           |
|----------------|--------|---------------------------------------------------------------------------------------|
| broker_name    | String | <b>Parameter description:</b><br>Broker name.<br><b>Value range:</b><br>N/A           |
| read_queue_num | Number | <b>Parameter description:</b><br>Number of read queues.<br><b>Value range:</b><br>N/A |

| Parameter       | Type   | Description                                                                            |
|-----------------|--------|----------------------------------------------------------------------------------------|
| write_queue_num | Number | <b>Parameter description:</b><br>Number of write queues.<br><b>Value range:</b><br>N/A |

## Example Requests

Querying details about a specified topic

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics/{topic}
```

## Example Responses

**Status code: 200**

Topic queried successfully.

```
{
  "total_read_queue_num" : 3,
  "total_write_queue_num" : 3,
  "permission" : "all",
  "brokers" : [ {
    "broker_name" : "broker-0",
    "read_queue_num" : 3,
    "write_queue_num" : 3
  } ],
  "message_type" : "NORMAL"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowOneTopicSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ShowOneTopicRequest request = new ShowOneTopicRequest();
request.withInstanceId("{instance_id}");
request.withTopic("{topic}");
try {
    ShowOneTopicResponse response = client.showOneTopic(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowOneTopicRequest()
        request.instance_id = "{instance_id}"
        request.topic = "{topic}"
        response = client.show_one_topic(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowOneTopicRequest{}
    request.InstanceId = "{instance_id}"
    request.Topic = "{topic}"
    response, err := client.ShowOneTopic(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         | Topic queried successfully. |

## Error Codes

See [Error Codes](#).

### 5.3.5 Modifying a Topic

#### Function

This API is used to modify a topic.

#### Calling Method

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

#### URI

PUT /v2/{project\_id}/instances/{instance\_id}/topics/{topic}

Table 5-73 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| topic       | Yes       | String | Topic name.                                                           |

#### Request Parameters

Table 5-74 Request body parameters

| Parameter      | Mandatory | Type   | Description                                                                                                                              |
|----------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| read_queue_num | No        | Number | <b>Definition:</b><br>Total number of read queues.<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                                                                                                                               |
|-----------------|-----------|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| write_queue_num | No        | Number                                                  | <b>Definition:</b><br>Total number of write queues.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| permission      | No        | String                                                  | <b>Definition:</b><br>Permission.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                   |
| queues          | No        | Array of <a href="#">UpdateTopicQueueEntity</a> objects | <b>Definition:</b><br>Queue.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                        |
| topic_desc      | No        | String                                                  | <b>Definition:</b><br>Topic description.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A            |

**Table 5-75** UpdateTopicQueueEntity

| Parameter       | Mandatory | Type   | Description                                                                                                                         |
|-----------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------|
| broker          | No        | String | <b>Definition:</b><br>Broker name.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A            |
| read_queue_num  | No        | Number | <b>Definition:</b><br>Number of read queues.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A  |
| write_queue_num | No        | Number | <b>Definition:</b><br>Number of write queues.<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: 204**

**Table 5-76** Response body parameters

| Parameter | Type   | Description                                |
|-----------|--------|--------------------------------------------|
| job_id    | String | ID of the specification modification task. |

## Example Requests

Changing a specified topic's total read queues to 3 and total write queues to 3

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics/{topic}

{
  "read_queue_num" : 3,
  "write_queue_num" : 3,
  "permission" : "all"
}
```

## Example Responses

**Status code: 204**

The topic is modified.

```
{
  "job_id" : "93b94287-728d-4bb1-a158-cb66cb0854e7"
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Changing a specified topic's total read queues to 3 and total write queues to 3

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class UpdateTopicSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateTopicRequest request = new UpdateTopicRequest();
        request.withInstanceId("{instance_id}");
        request.withTopic("{topic}");
        UpdateTopicReq body = new UpdateTopicReq();
        body.withPermission(UpdateTopicReq.PermissionEnum.fromValue("all"));
        body.withWriteQueueNum(java.math.BigDecimal.valueOf(3));
        body.withReadQueueNum(java.math.BigDecimal.valueOf(3));
```

```
request.withBody(body);
try {
    UpdateTopicResponse response = client.updateTopic(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

Changing a specified topic's total read queues to 3 and total write queues to 3

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateTopicRequest()
        request.instance_id = "{instance_id}"
        request.topic = "{topic}"
        request.body = UpdateTopicReq(
            permission="all",
            write_queue_num=3,
            read_queue_num=3
        )
        response = client.update_topic(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 a specified topic's total read queues to 3 and total write queues to 3

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTopicRequest{}
    request.InstanceId = "{instance_id}"
    request.Topic = "{topic}"
    permissionUpdateTopicReq := model.GetUpdateTopicReqPermissionEnum().ALL
    writeQueueNumUpdateTopicReq := float32(3)
    readQueueNumUpdateTopicReq := float32(3)
    request.Body = &model.UpdateTopicReq{
        Permission: &permissionUpdateTopicReq,
        WriteQueueNum: &writeQueueNumUpdateTopicReq,
        ReadQueueNum: &readQueueNumUpdateTopicReq,
    }
    response, err := client.UpdateTopic(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         | The topic is modified. |

## Error Codes

See [Error Codes](#).

## 5.3.6 Querying the Topic Consumer Group List

### Function

This API is used to query the topic consumer group list.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/topics/{topic}/groups

**Table 5-77** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |



| Parameter | Mandatory | Type   | Description                                                                                                                              |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| topic     | Yes       | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Table 5-78 Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                           |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | <b>Parameter description:</b><br>Maximum number of records returned in the current query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1-50<br><b>Default value:</b><br>10 |
| offset    | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>N/A                           |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-79** Response body parameters

| Parameter | Type             | Description                                           |
|-----------|------------------|-------------------------------------------------------|
| groups    | Array of strings | <b>Parameter description:</b><br>Consumer group list. |

## Example Requests

Querying the consumer group list of a specified topic

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics/{topic}/groups
```

## Example Responses

**Status code: 200**

Topic consumer group list queried successfully.

```
{
  "groups" : [ "CID_JODIE_1", "test_consumer" ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListConsumerGroupOfTopicSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
```

```
ListConsumerGroupOfTopicRequest request = new ListConsumerGroupOfTopicRequest();
request.withInstanceId("{instance_id}");
request.withTopic("{topic}");
try {
    ListConsumerGroupOfTopicResponse response = client.listConsumerGroupOfTopic(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListConsumerGroupOfTopicRequest()
        request.instance_id = "{instance_id}"
        request.topic = "{topic}"
        response = client.list_consumer_group_of_topic(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
        rocketmq.RocketMQClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ListConsumerGroupOfTopicRequest{}  
    request.InstanceId = "{instance_id}"  
    request.Topic = "{topic}"  
    response, err := client.ListConsumerGroupOfTopic(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         | Topic consumer group list queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.3.7 Querying the Number of Messages in a Topic

### Function

This API is used to query the number of messages in a topic.

## Calling Method

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

## URI

GET /v2/{project\_id}/instances/{instance\_id}/topics/{topic}/status

**Table 5-80** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| topic       | Yes       | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                               |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-81** Response body parameters

| Parameter  | Type                            | Description                                                                    |
|------------|---------------------------------|--------------------------------------------------------------------------------|
| max_offset | Integer                         | <b>Parameter description:</b><br>Maximum offset.<br><b>Value range:</b><br>N/A |
| min_offset | Integer                         | <b>Parameter description:</b><br>Minimum offset.<br><b>Value range:</b><br>N/A |
| brokers    | Array of <b>brokers</b> objects | <b>Parameter description:</b><br>Brokers.                                      |

**Table 5-82** brokers

| Parameter   | Type                           | Description                                                                 |
|-------------|--------------------------------|-----------------------------------------------------------------------------|
| queues      | Array of <b>queues</b> objects | <b>Parameter description:</b><br>Queue list.                                |
| broker_name | String                         | <b>Parameter description:</b><br>Broker name.<br><b>Value range:</b><br>N/A |

**Table 5-83** queues

| Parameter | Type    | Description                                                              |
|-----------|---------|--------------------------------------------------------------------------|
| id        | Integer | <b>Parameter description:</b><br>Queue ID.<br><b>Value range:</b><br>N/A |

| Parameter         | Type    | Description                                                                              |
|-------------------|---------|------------------------------------------------------------------------------------------|
| min_offset        | Integer | <b>Parameter description:</b><br>Minimum offset.<br><b>Value range:</b><br>N/A           |
| max_offset        | Integer | <b>Parameter description:</b><br>Maximum offset.<br><b>Value range:</b><br>N/A           |
| last_message_time | Long    | <b>Parameter description:</b><br>Time of the last message.<br><b>Value range:</b><br>N/A |

## Example Requests

Querying the number of messages in a specified topic

GET https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/topics/{topic}/status

## Example Responses

**Status code: 200**

Successful

Successful.

```
{
  "brokers" : {
    "queues" : [ {
      "id" : 0,
      "min_offset" : 0,
      "max_offset" : 2,
      "last_message_time" : 1662689877152
    } ],
    "broker_name" : "broker-0"
  }
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowTopicStatusSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowTopicStatusRequest request = new ShowTopicStatusRequest();
        request.withInstanceId("{instance_id}");
        request.withTopic("{topic}");
        try {
            ShowTopicStatusResponse response = client.showTopicStatus(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowTopicStatusRequest()
    request.instance_id = "{instance_id}"
    request.topic = "{topic}"
    response = client.show_topic_status(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowTopicStatusRequest{}
    request.InstanceId = "{instance_id}"
    request.Topic = "{topic}"
    response, err := client.ShowTopicStatus(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         | Successful  |

## Error Codes

See [Error Codes](#).

# 5.4 Message Management

## 5.4.1 Querying Messages

### Function

This API is used to query messages.

### Calling Method

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

### URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/messages

**Table 5-84** Path Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                  |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------|
| engine    | Yes       | String | <b>Parameter description:</b><br>Message engine.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-85** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                              |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------|
| topic     | Yes       | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type   | Description                                                                                                                                                      |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| queue     | No        | String | <b>Parameter description:</b><br>Queue.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                              |
| limit     | No        | String | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A         |
| offset    | No        | String | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>$\geq 0$<br><b>Default value:</b><br>N/A |
| key       | No        | String | <b>Parameter description:</b><br>Key of a message.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                   |

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                         |
|------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| start_time | No        | String | <b>Parameter description:</b><br>Start time.<br><b>Constraints:</b><br>This parameter is mandatory when msg_id is not used for query.<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| end_time   | No        | String | <b>Parameter description:</b><br>End time.<br><b>Constraints:</b><br>This parameter is mandatory when msg_id is not used for query.<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A   |
| msg_id     | No        | String | <b>Parameter description:</b><br>Message ID.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                            |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-86** Response body parameters

| Parameter | Type                                     | Description                                                                              |
|-----------|------------------------------------------|------------------------------------------------------------------------------------------|
| messages  | Array of <a href="#">Message</a> objects | <b>Parameter description:</b><br>Message list.                                           |
| total     | Number                                   | <b>Parameter description:</b><br>Total number of messages.<br><b>Value range:</b><br>N/A |

**Table 5-87** Message

| Parameter       | Type    | Description                                                                                        |
|-----------------|---------|----------------------------------------------------------------------------------------------------|
| msg_id          | String  | <b>Parameter description:</b><br>Message ID.<br><b>Value range:</b><br>N/A                         |
| instance_id     | String  | <b>Parameter description:</b><br>Instance ID.<br><b>Value range:</b><br>N/A                        |
| topic           | String  | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                         |
| store_timestamp | Number  | <b>Parameter description:</b><br>Time when the message is stored.<br><b>Value range:</b><br>N/A    |
| born_timestamp  | Number  | <b>Parameter description:</b><br>Time when the message is generated.<br><b>Value range:</b><br>N/A |
| reconsume_times | Integer | <b>Parameter description:</b><br>Number of retry times.<br><b>Value range:</b><br>N/A              |

| Parameter     | Type                                           | Description                                                                                                       |
|---------------|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| body          | String                                         | <b>Parameter description:</b><br>Message body.<br><b>Value range:</b><br>N/A                                      |
| body_crc      | Number                                         | <b>Parameter description:</b><br>Message body checksum.<br><b>Value range:</b><br>N/A                             |
| store_size    | Number                                         | <b>Parameter description:</b><br>Storage size.<br><b>Value range:</b><br>N/A                                      |
| property_list | Array of <a href="#">property_list</a> objects | <b>Parameter description:</b><br>Message attribute list.                                                          |
| born_host     | String                                         | <b>Parameter description:</b><br>IP address of the host that generates the message.<br><b>Value range:</b><br>N/A |
| store_host    | String                                         | <b>Parameter description:</b><br>IP address of the host that stores the message.<br><b>Value range:</b><br>N/A    |
| queue_id      | Integer                                        | <b>Parameter description:</b><br>Queue ID.<br><b>Value range:</b><br>N/A                                          |
| queue_offset  | Integer                                        | <b>Parameter description:</b><br>Offset in the queue.<br><b>Value range:</b><br>N/A                               |

Table 5-88 property\_list

| Parameter | Type   | Description                                                                     |
|-----------|--------|---------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Attribute name.<br><b>Value range:</b><br>N/A  |
| value     | String | <b>Parameter description:</b><br>Attribute value.<br><b>Value range:</b><br>N/A |

Example Requests

Querying messages

GET https://{endpoint}/v2/{engine}/{project\_id}/instances/{instance\_id}/messages?topic={topic}

Example Responses

Status code: 200

Messages queried successfully.

```
{
  "messages": [ {
    "msg_id": "C0A807C9000027740000000000000030",
    "instance_id": "11c45539-xxxx-xxxx-xxxx-812c41f61f30",
    "topic": "topic-test",
    "store_timestamp": 1648888166319,
    "born_timestamp": 1648888166275,
    "reconsume_times": 0,
    "body": "xxxx",
    "body_crc": 1932557065,
    "store_size": 175,
    "property_list": [ {
      "name": "KEYS",
      "value": ""
    }, {
      "name": "UNIQ_KEY",
      "value": "7F00000123DC6E0BE85808B037820000"
    }, {
      "name": "CLUSTER",
      "value": "DmsCluster"
    }, {
      "name": "TAGS",
      "value": ""
    } ],
    "born_host": "192.168.0.66:50098",
    "store_host": "192.168.7.201:10100",
    "queue_id": 2,
    "queue_offset": 0
  } ],
  "total": 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListMessagesSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListMessagesRequest request = new ListMessagesRequest();
        request.withEngine(ListMessagesRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        try {
            ListMessagesResponse response = client.listMessages(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListMessagesRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        response = client.list_messages(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListMessagesRequest{
        request.Engine = model.GetListMessagesRequestEngineEnum().ENGINE
        request.InstanceId = "{instance_id}"
    }
    response, err := client.ListMessages(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         | Messages queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.4.2 Sending a Message

### Function

This API is used to send a message.

### Calling Method

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

### URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/messages

**Table 5-89** Path Parameters

| Parameter | Mandatory | Type   | Description                                                                                                         |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------|
| engine    | Yes       | String | <b>Definition:</b><br>Engine.<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                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<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 5-90 Request body parameters

| Parameter | Mandatory | Type   | Description                                                    |
|-----------|-----------|--------|----------------------------------------------------------------|
| topic     | No        | String | <b>Definition:</b><br>Topic name.<br><b>Range:</b><br>N/A      |
| body      | No        | String | <b>Definition:</b><br>Message content.<br><b>Range:</b><br>N/A |

| Parameter     | Mandatory | Type                                                   | Description                                                 |
|---------------|-----------|--------------------------------------------------------|-------------------------------------------------------------|
| property_list | No        | Array of <a href="#">SendMessageProperties</a> objects | <b>Definition:</b><br>Feature list.<br><b>Range:</b><br>N/A |
| msg_id        | No        | String                                                 | <b>Definition:</b><br>Message ID.<br><b>Range:</b><br>N/A   |
| queue_id      | No        | Number                                                 | <b>Definition:</b><br>Queue ID.<br><b>Range:</b><br>N/A     |
| queue_offset  | No        | Number                                                 | <b>Definition:</b><br>Queue offset.<br><b>Range:</b><br>N/A |
| broker_name   | No        | String                                                 | <b>Definition:</b><br>Broker name.<br><b>Range:</b><br>N/A  |

**Table 5-91** SendMessageProperties

| Parameter | Mandatory | Type   | Description                                                  |
|-----------|-----------|--------|--------------------------------------------------------------|
| name      | No        | String | <b>Definition:</b><br>Feature name.<br><b>Range:</b><br>N/A  |
| value     | No        | String | <b>Definition:</b><br>Feature value.<br><b>Range:</b><br>N/A |

## Response Parameters

**Status code: 200**

**Table 5-92** Response body parameters

| Parameter     | Type                                                   | Description                                                    |
|---------------|--------------------------------------------------------|----------------------------------------------------------------|
| topic         | String                                                 | <b>Definition:</b><br>Topic name.<br><b>Range:</b><br>N/A      |
| body          | String                                                 | <b>Definition:</b><br>Message content.<br><b>Range:</b><br>N/A |
| property_list | Array of <a href="#">SendMessageProperties</a> objects | <b>Definition:</b><br>Feature list.<br><b>Range:</b><br>N/A    |
| msg_id        | String                                                 | <b>Definition:</b><br>Message ID.<br><b>Range:</b><br>N/A      |
| queue_id      | Number                                                 | <b>Definition:</b><br>Queue ID.<br><b>Range:</b><br>N/A        |
| queue_offset  | Number                                                 | <b>Definition:</b><br>Queue offset.<br><b>Range:</b><br>N/A    |
| broker_name   | String                                                 | <b>Definition:</b><br>Broker name.<br><b>Range:</b><br>N/A     |

**Table 5-93** SendMessageProperties

| Parameter | Type   | Description                                                  |
|-----------|--------|--------------------------------------------------------------|
| name      | String | <b>Definition:</b><br>Feature name.<br><b>Range:</b><br>N/A  |
| value     | String | <b>Definition:</b><br>Feature value.<br><b>Range:</b><br>N/A |

## Example Requests

Sending a message

```
POST https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/messages?topic={topic}
```

## Example Responses

**Status code: 200**

Successful

```
{
  "topic": "aaaaaaaaaaaa",
  "body": "test",
  "property_list": [ ],
  "msg_id": "644F0E2A315323EAB33D8F4733110009",
  "queue_id": 0,
  "queue_offset": 0,
  "broker_name": "broker-0"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class SendMessageSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
SendMessageRequest request = new SendMessageRequest();
request.withEngine("{engine}");
request.withInstanceId("{instance_id}");
SendMessageResp body = new SendMessageResp();
request.withBody(body);
try {
    SendMessageResponse response = client.sendMessage(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SendMessageRequest()
        request.engine = "{engine}"
```



```
request.instance_id = "{instance_id}"
request.body = SendMessageResp(
)
response = client.send_message(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SendMessageRequest{
        request.Engine = "{engine}"
        request.InstanceId = "{instance_id}"
        request.Body = &model.SendMessageResp{
        }
    }
    response, err := client.SendMessage(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         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.4.3 Querying the Message Trace

### Function

This API is used to query the message trace.

### Calling Method

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

### URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/trace

**Table 5-94** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Message engine.                                                       |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

**Table 5-95** Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                         |
|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------|
| msg_id    | Yes       | String  | Message ID.                                                                                         |
| limit     | No        | Integer | Number of records to be queried.                                                                    |
| offset    | No        | Integer | Offset, which is the position where the query starts. The value must be greater than or equal to 0. |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-96** Response body parameters

| Parameter       | Type                                   | Description                  |
|-----------------|----------------------------------------|------------------------------|
| total           | Number                                 | Total.                       |
| next_offset     | Integer                                | Offset of the next page.     |
| previous_offset | Integer                                | Offset of the previous page. |
| trace           | Array of <a href="#">trace</a> objects | Message trace list.          |

**Table 5-97** trace

| Parameter      | Type    | Description                                                                                                                                                           |
|----------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| success        | Boolean | Whether the request is successful.                                                                                                                                    |
| trace_type     | String  | Trace type.                                                                                                                                                           |
| timestamp      | Number  | Time.                                                                                                                                                                 |
| group_name     | String  | Producer group or consumer group.                                                                                                                                     |
| cost_time      | Number  | Time spent.                                                                                                                                                           |
| request_id     | String  | Request ID.                                                                                                                                                           |
| consume_status | Number  | Consumption status. <ul style="list-style-type: none"><li>• 0: Successful</li><li>• 1: Timeout</li><li>• 2: Exception</li><li>• 3: Null</li><li>• 5: Failed</li></ul> |
| topic          | String  | Topic name.                                                                                                                                                           |
| msg_id         | String  | Message ID.                                                                                                                                                           |
| offset_msg_id  | String  | Offset message ID.                                                                                                                                                    |
| tags           | String  | Message tag.                                                                                                                                                          |
| keys           | String  | Message keys.                                                                                                                                                         |

| Parameter              | Type    | Description                                           |
|------------------------|---------|-------------------------------------------------------|
| store_host             | String  | IP address of the host that stores the message.       |
| client_host            | String  | IP address of the host that generates the message.    |
| retry_times            | Integer | Number of retry times.                                |
| body_length            | Number  | Message body length.                                  |
| msg_type               | String  | Message type.                                         |
| transaction_state      | String  | Transaction status.                                   |
| transaction_id         | String  | Transaction ID.                                       |
| from_transaction_check | Boolean | Whether the response is a transaction check response. |

## Example Requests

Querying the message trace of a RocketMQ instance

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/trace?msg_id={msg_id}
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "total": 1,
  "next_offset": -1,
  "previous_offset": -1,
  "trace": [ {
    "success": true,
    "trace_type": "Pub",
    "timestamp": 1634822858013,
    "group_name": "ProducerGroupName",
    "cost_time": 47,
    "request_id": "644F0069C829287CBBF26B9A54390000",
    "consume_status": 0,
    "topic": "aaaaa",
    "msg_id": "7F000001561018B4AAC26B9A0D1D0004",
    "offset_msg_id": "C0A8011700002774000000000000BE12",
    "tags": "TagA",
    "keys": "OrderID188",
    "store_host": "192.168.0.1:10101",
    "client_host": "127.0.0.1",
    "retry_times": 0,
    "body_length": 11,
    "msg_type": "Normal_Msg",
    "transaction_state": null,
    "transaction_id": null,
    "from_transaction_check": 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListMessageTraceSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListMessageTraceRequest request = new ListMessageTraceRequest();
        request.withEngine(ListMessageTraceRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        try {
            ListMessageTraceResponse response = client.listMessageTrace(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListMessageTraceRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        response = client.list_message_trace(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListMessageTraceRequest{}
    request.Engine = model.GetListMessageTraceRequestEngineEnum().ENGINE
    request.InstanceId = "{instance_id}"
    response, err := client.ListMessageTrace(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         | The query is successful. |

## Error Codes

See [Error Codes](#).

## 5.4.4 Exporting Dead Letter Messages

### Function

This API is used to export dead letter messages.

### Calling Method

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

### URI

POST /v2/{project\_id}/instances/{instance\_id}/messages/export

**Table 5-98** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

## Request Parameters

**Table 5-99** Request body parameters

| Parameter     | Mandatory | Type             | Description      |
|---------------|-----------|------------------|------------------|
| topic         | No        | String           | Topic name.      |
| msg_id_list   | No        | Array of strings | Message ID list. |
| uniq_key_list | No        | Array of strings | Unique key list. |

## Response Parameters

**Status code: 200****Table 5-100** Response body parameters

| Parameter | Type                            | Description |
|-----------|---------------------------------|-------------|
| [items]   | Array of <b>Message</b> objects | Message.    |

**Table 5-101** Message

| Parameter       | Type                                  | Description                                        |
|-----------------|---------------------------------------|----------------------------------------------------|
| msg_id          | String                                | Message ID.                                        |
| instance_id     | String                                | Instance ID.                                       |
| topic           | String                                | Topic name.                                        |
| store_timestamp | Number                                | Time when the message is stored.                   |
| born_timestamp  | Number                                | Time when the message is generated.                |
| reconsume_times | Integer                               | Number of retry times.                             |
| body            | String                                | Message body.                                      |
| body_crc        | Number                                | Message body checksum.                             |
| store_size      | Number                                | Storage size.                                      |
| property_list   | Array of <b>property_list</b> objects | Message attribute list.                            |
| born_host       | String                                | IP address of the host that generates the message. |



| Parameter    | Type    | Description                                     |
|--------------|---------|-------------------------------------------------|
| store_host   | String  | IP address of the host that stores the message. |
| queue_id     | Integer | Queue ID.                                       |
| queue_offset | Integer | Offset in the queue.                            |

**Table 5-102** property\_list

| Parameter | Type   | Description      |
|-----------|--------|------------------|
| name      | String | Attribute name.  |
| value     | String | Attribute value. |

## Example Requests

Exporting dead letter messages with the specified message IDs and keys in the topic

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/messages/export
```

```
{
  "topic": "%DLQ%group1",
  "msg_id_list": [ "C0A8011700002774000000000013B19D", "C0A8011700002774000000000013B30F" ],
  "uniq_key_list": [ "7F000001001C18B4AAC26B8AED170010", "7F000001001C18B4AAC26B8AEE030015" ]
}
```

## Example Responses

**Status code: 200**

Dead letter messages exported successfully.

```
{
  "topic": "topic_01",
  "body": "Hello world",
  "property_list": {
    "name": "ORIGIN_MESSAGE_ID",
    "value": "C0A8005B00002775000000000000EBAE"
  },
  "msg_id": "C0A8005B00002775000000000000133A2",
  "instance_id": "56055acb-3c3b-4481-aeab-10464086c2b4",
  "store_timestamp": 1662690563020,
  "born_timestamp": 1662690324415,
  "reconsume_times": 5,
  "body_crc": 198614610,
  "store_size": 317,
  "born_host": "10.58.233.224:63529",
  "store_host": "192.168.0.91:10101",
  "queue_id": 0,
  "queue_offset": 0
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Exporting dead letter messages with the specified message IDs and keys in the topic

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class ExportDlqMessageSolution {

    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);

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

        ExportDlqMessageRequest request = new ExportDlqMessageRequest();
        request.withInstanceId("{instance_id}");
        ExportDlqMessageReq body = new ExportDlqMessageReq();
        List<String> listbodyUniqKeyList = new ArrayList<>();
        listbodyUniqKeyList.add("7F000001001C18B4AAC26B8AED170010");
        listbodyUniqKeyList.add("7F000001001C18B4AAC26B8AEE030015");
        List<String> listbodyMsgIdList = new ArrayList<>();
        listbodyMsgIdList.add("C0A8011700002774000000000013B19D");
        listbodyMsgIdList.add("C0A8011700002774000000000013B30F");
        body.withUniqKeyList(listbodyUniqKeyList);
        body.withMsgIdList(listbodyMsgIdList);
        body.withTopic("%DLQ%group1");
        request.withBody(body);
        try {
            ExportDlqMessageResponse response = client.exportDlqMessage(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

Exporting dead letter messages with the specified message IDs and keys in the topic

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ExportDlqMessageRequest()
        request.instance_id = "{instance_id}"
        listUniqKeyListbody = [
            "7F000001001C18B4AAC26B8AED170010",
            "7F000001001C18B4AAC26B8AEE030015"
        ]
        listMsgIdListbody = [
            "C0A8011700002774000000000013B19D",
            "C0A8011700002774000000000013B30F"
        ]
        request.body = ExportDlqMessageReq(
            uniq_key_list=listUniqKeyListbody,
            msg_id_list=listMsgIdListbody,
            topic="%DLQ%group1"
        )
        response = client.export_dlq_message(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

Exporting dead letter messages with the specified message IDs and keys in the topic

```
package main
```

```
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
        rocketmq.RocketMQClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ExportDlqMessageRequest{  
        request.InstanceId = "{instance_id}"  
        var listUniqKeyListbody = []string{  
            "7F000001001C18B4AAC26B8AED170010",  
            "7F000001001C18B4AAC26B8AEE030015",  
        }  
        var listMsgIdListbody = []string{  
            "C0A8011700002774000000000013B19D",  
            "C0A8011700002774000000000013B30F",  
        }  
        topicExportDlqMessageReq := "%DLQ%group1"  
        request.Body = &model.ExportDlqMessageReq{  
            UniqKeyList: &listUniqKeyListbody,  
            MsgIdList: &listMsgIdListbody,  
            Topic: &topicExportDlqMessageReq,  
        }  
        response, err := client.ExportDlqMessage(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         | Dead letter messages exported successfully. |

## Error Codes

See [Error Codes](#).

## 5.4.5 Resending Dead Letter Messages

### Function

Resending dead letter messages

### Calling Method

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

### URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/messages/deadletter-resend

**Table 5-103** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Message engine.                                                       |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

**Table 5-104** Request body parameters

| Parameter   | Mandatory | Type             | Description   |
|-------------|-----------|------------------|---------------|
| topic       | No        | String           | Topic name.   |
| msg_id_list | No        | Array of strings | Message list. |

### Response Parameters

Status code: 200

**Table 5-105** Response body parameters

| Parameter      | Type                                            | Description                                |
|----------------|-------------------------------------------------|--------------------------------------------|
| resend_results | Array of <a href="#">resend_results</a> objects | Result of resending a dead letter message. |

**Table 5-106** resend\_results

| Parameter     | Type   | Description    |
|---------------|--------|----------------|
| msg_id        | String | Message ID.    |
| error_code    | String | Error code.    |
| error_message | String | Error message. |

## Example Requests

Resending dead letter messages

```
POST https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/messages/deadletter-resend
{
  "topic": "%DLQ%group1",
  "msg_id_list": [ "id1" ]
}
```

## Example Responses

**Status code: 200**

Dead letter messages resent.

```
{
  "resend_results": [ {
    "msg_id": "C0A8149E00002776000000000000B6835",
    "error_code": "DMS.00000000",
    "error_message": "Success."
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Resending dead letter messages

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class SendDlqMessageSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        SendDlqMessageRequest request = new SendDlqMessageRequest();
        request.withEngine(SendDlqMessageRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        DeadletterResendReq body = new DeadletterResendReq();
        List<String> listbodyMsgIdList = new ArrayList<>();
        listbodyMsgIdList.add("id1");
        body.withMsgIdList(listbodyMsgIdList);
        body.withTopic("%DLQ%group1");
        request.withBody(body);
        try {
            SendDlqMessageResponse response = client.sendDlqMessage(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

### Resending dead letter messages

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = SendDlqMessageRequest()
    request.engine = "{engine}"
    request.instance_id = "{instance_id}"
    listMsgIdListbody = [
        "id1"
    ]
    request.body = DeadletterResendReq(
        msg_id_list=listMsgIdListbody,
        topic="%DLQ%group1"
    )
    response = client.send_dlq_message(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

### Resending dead letter messages

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```



```
request := &model.SendDlqMessageRequest{}
request.Engine = model.GetSendDlqMessageRequestEngineEnum().ENGINE
request.InstanceId = "{instance_id}"
var listMsgIdListbody = []string{
    "id1",
}
topicDeadletterResendReq:= "%DLQ%group1"
request.Body = &model.DeadletterResendReq{
    MsgIdList: &listMsgIdListbody,
    Topic: &topicDeadletterResendReq,
}
response, err := client.SendDlqMessage(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         | Dead letter messages resent. |

## Error Codes

See [Error Codes](#).

## 5.4.6 Verifying Consumption

### Function

This API is used to verify consumption.

### Calling Method

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

### URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/messages/resent

**Table 5-107** Path Parameters

| Parameter | Mandatory | Type   | Description     |
|-----------|-----------|--------|-----------------|
| engine    | Yes       | String | Message engine. |

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

## Request Parameters

**Table 5-108** Request body parameters

| Parameter   | Mandatory | Type             | Description                       |
|-------------|-----------|------------------|-----------------------------------|
| group       | Yes       | String           | Group ID.                         |
| topic       | No        | String           | Topic to which a message belongs. |
| client_id   | Yes       | String           | Client ID.                        |
| msg_id_list | No        | Array of strings | Message list.                     |

## Response Parameters

**Status code: 200**

**Table 5-109** Response body parameters

| Parameter      | Type                                            | Description                      |
|----------------|-------------------------------------------------|----------------------------------|
| resend_results | Array of <a href="#">resend_results</a> objects | Consumption verification result. |

**Table 5-110** resend\_results

| Parameter     | Type   | Description    |
|---------------|--------|----------------|
| msg_id        | String | Message ID.    |
| error_code    | String | Error code.    |
| error_message | String | Error message. |

## Example Requests

Verifying consumption

```
POST https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/messages/resend

{
  "group": "GID_test",
  "client_id": "192.168.0.1",
  "msg_id_list": [ "id1" ]
}
```

## Example Responses

**Status code: 200**

Consumption verified.

```
{
  "resend_results": [ {
    "msg_id": "COA8149E00002776000000000000B6835",
    "error_code": "DMS.00000000",
    "error_message": "Success."
  } ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Verifying consumption

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class ValidateConsumedMessageSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ValidateConsumedMessageRequest request = new ValidateConsumedMessageRequest();
```

```
request.withEngine(ValidateConsumedMessageRequest.EngineEnum.fromValue("{engine}"));
request.withInstanceId("{instance_id}");
ResendReq body = new ResendReq();
List<String> listbodyMsgIdList = new ArrayList<>();
listbodyMsgIdList.add("id1");
body.withMsgIdList(listbodyMsgIdList);
body.withClientId("192.168.0.1");
body.withGroup("GID_test");
request.withBody(body);
try {
    ValidateConsumedMessageResponse response = client.validateConsumedMessage(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

### Verifying consumption

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ValidateConsumedMessageRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        listMsgIdListbody = [
            "id1"
        ]
        request.body = ResendReq(
            msg_id_list=listMsgIdListbody,
            client_id="192.168.0.1",
            group="GID_test"
        )
        response = client.validate_consumed_message(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

### Verifying consumption

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ValidateConsumedMessageRequest{}
    request.Engine = model.GetValidateConsumedMessageRequestEngineEnum().ENGINE
    request.InstanceId = "{instance_id}"
    var listMsgIdListbody = []string{
        "id1",
    }
    request.Body = &model.ResendReq{
        MsgIdList: &listMsgIdListbody,
        ClientId: "192.168.0.1",
        Group: "GID_test",
    }
    response, err := client.ValidateConsumedMessage(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         | Consumption verified. |

## Error Codes

See [Error Codes](#).

# 5.5 User Management

## 5.5.1 Creating a User

### Function

This API is used to create a user.

### Calling Method

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

### URI

POST /v2/{project\_id}/instances/{instance\_id}/users

**Table 5-111** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                        |
|------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Request Parameters

**Table 5-112** Request body parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                   |
|------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access_key | No        | String | <b>Parameter description:</b><br>Username.<br><b>Constraints:</b><br>Starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter            | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| secret_key           | No        | String  | <p><b>Parameter description:</b><br/>Secret key.</p> <p><b>Constraints:</b><br/>8 to 32 characters.<br/>Contain at least three of the following character types:</p> <ul style="list-style-type: none"> <li>• Uppercase letters</li> <li>• Lowercase letters</li> <li>• Digits</li> <li>• Special characters `~!@#\$%^&amp;*()-_+=\ [{ }];:","&lt;.&gt;/?`</li> </ul> <p>Cannot be the username or the username spelled backwards.</p> <p><b>Value range:</b><br/>N/A</p> <p><b>Default value:</b><br/>N/A</p> |
| white_remote_address | No        | String  | <p><b>Parameter description:</b><br/>IP address whitelist.</p> <p><b>Constraints:</b><br/>N/A</p> <p><b>Value range:</b><br/>N/A</p> <p><b>Default value:</b><br/>N/A</p>                                                                                                                                                                                                                                                                                                                                      |
| admin                | No        | Boolean | <p><b>Parameter description:</b><br/>Whether the user is an administrator.</p> <p><b>Constraints:</b><br/>N/A</p> <p><b>Value range:</b></p> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <p><b>Default value:</b><br/>N/A</p>                                                                                                                                                                                                                             |



| Parameter          | Mandatory | Type                                         | Description                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------|-----------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| default_topic_perm | No        | String                                       | <b>Parameter description:</b><br>Default topic permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>PUB</b>: publish permissions.</li> <li>• <b>SUB</b>: subscribe permissions.</li> <li>• <b>PUB SUB</b>: subscribe and publish permissions.</li> <li>• <b>DENY</b>: no permission.</li> </ul> <b>Default value:</b><br>N/A |
| default_group_perm | No        | String                                       | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>SUB</b>: subscribe permissions.</li> <li>• <b>DENY</b>: no permission.</li> </ul> <b>Default value:</b><br>N/A                                                                                                  |
| topic_perms        | No        | Array of <a href="#">topic_perms</a> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                                                                                                               |

| Parameter   | Mandatory | Type                                         | Description                                                                                                                                                      |
|-------------|-----------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| group_perms | No        | Array of <a href="#">group_perms</a> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-113** topic\_perms

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                                                                                                                     |
| perm      | No        | String | <b>Parameter description:</b><br>Topic permission.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>PUB:</b> publish permissions.</li> <li>• <b>SUB:</b> subscribe permissions.</li> <li>• <b>PUB SUB:</b> subscribe and publish permissions.</li> <li>• <b>DENY:</b> no permission.</li> </ul> <b>Default value:</b><br>N/A |

**Table 5-114** group\_perms

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                               |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                         |
| perm      | No        | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB:</b> subscribe permissions.</li><li>• <b>DENY:</b> no permission.</li></ul> <b>Default value:</b><br>N/A |

## Response Parameters

**Status code: 200**

**Table 5-115** Response body parameters

| Parameter            | Type   | Description                                                                          |
|----------------------|--------|--------------------------------------------------------------------------------------|
| access_key           | String | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A             |
| secret_key           | String | <b>Parameter description:</b><br>Secret key.<br><b>Value range:</b><br>N/A           |
| white_remote_address | String | <b>Parameter description:</b><br>IP address whitelist.<br><b>Value range:</b><br>N/A |

| Parameter          | Type                                | Description                                                                                                                                                                                                                                                                                                           |
|--------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| admin              | Boolean                             | <b>Parameter description:</b><br>Whether the user is an administrator.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true</b>: yes</li><li>• <b>false</b>: no</li></ul>                                                                                                                           |
| default_topic_perm | String                              | <b>Parameter description:</b><br>Default topic permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |
| default_group_perm | String                              | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul>                                                                                                |
| topic_perms        | Array of <b>topic_perms</b> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                             |
| group_perms        | Array of <b>group_perms</b> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                    |

**Table 5-116** topic\_perms

| Parameter | Type   | Description                                                                |
|-----------|--------|----------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A |

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                  |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| perm      | String | <b>Parameter description:</b><br>Topic permission.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

**Table 5-117** group\_perms

| Parameter | Type   | Description                                                                                                                                                                                                    |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Value range:</b><br>N/A                                                                                                                            |
| perm      | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

## Example Requests

Creating a non-administrator user with permissions to publish and subscribe to topic1 and group1

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/users

```
{
  "access_key" : "user_name",
  "secret_key" : "*****",
  "white_remote_address" : "",
  "admin" : false,
  "default_topic_perm" : "DENY",
  "default_group_perm" : "DENY",
  "topic_perms" : [ {
    "name" : "topic1",
    "perm" : "PUB|SUB"
  } ],
  "group_perms" : [ {
    "name" : "group1",
    "perm" : "PUB|SUB"
  } ]
}
```

## Example Responses

### Status code: 200

The creation is successful.

```
{
  "access_key" : "test_01",
  "admin" : false,
  "default_group_perm" : "DENY",
  "default_topic_perm" : "SUB",
  "group_perms" : [ ],
  "secret_key" : "*****",
  "topic_perms" : [ ],
  "white_remote_address" : ""
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating a non-administrator user with permissions to publish and subscribe to topic1 and group1

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class CreateUserSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateUserRequest request = new CreateUserRequest();
        request.withInstanceId("{instance_id}");
        User body = new User();
        List<UserGroupPerms> listbodyGroupPerms = new ArrayList<>();
        listbodyGroupPerms.add(
```

```
        new UserGroupPerms()
            .WithName("group1")
            .withPerm(UserGroupPerms.PermEnum.fromValue("PUB|SUB"))
    );
    List<UserTopicPerms> listbodyTopicPerms = new ArrayList<>();
    listbodyTopicPerms.add(
        new UserTopicPerms()
            .WithName("topic1")
            .withPerm(UserTopicPerms.PermEnum.fromValue("PUB|SUB"))
    );
    body.withGroupPerms(listbodyGroupPerms);
    body.withTopicPerms(listbodyTopicPerms);
    body.withDefaultGroupPerm(User.DefaultGroupPermEnum.fromValue("DENY"));
    body.withDefaultTopicPerm(User.DefaultTopicPermEnum.fromValue("DENY"));
    body.withAdmin(false);
    body.withWhiteRemoteAddress("");
    body.withSecretKey("*****");
    body.withAccessKey("user_name");
    request.withBody(body);
    try {
        CreateUserResponse response = client.createUser(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 non-administrator user with permissions to publish and subscribe to topic1 and group1

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateUserRequest()
        request.instance_id = "{instance_id}"
```

```
listGroupPermsbody = [
    UserGroupPerms(
        name="group1",
        perm="PUB|SUB"
    )
]
listTopicPermsbody = [
    UserTopicPerms(
        name="topic1",
        perm="PUB|SUB"
    )
]
request.body = User(
    group_perms=listGroupPermsbody,
    topic_perms=listTopicPermsbody,
    default_group_perm="DENY",
    default_topic_perm="DENY",
    admin=False,
    white_remote_address="",
    secret_key="*****",
    access_key="user_name"
)
response = client.create_user(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 non-administrator user with permissions to publish and subscribe to topic1 and group1

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateUserRequest{}
    request.InstanceId = "{instance_id}"
```



```
nameGroupPerms:= "group1"
permGroupPerms:= model.GetUserGroupPermsPermEnum().PUB|SUB
var listGroupPermsbody = []model.UserGroupPerms{
    {
        Name: &nameGroupPerms,
        Perm: &permGroupPerms,
    },
}
nameTopicPerms:= "topic1"
permTopicPerms:= model.GetUserTopicPermsPermEnum().PUB|SUB
var listTopicPermsbody = []model.UserTopicPerms{
    {
        Name: &nameTopicPerms,
        Perm: &permTopicPerms,
    },
}
defaultGroupPermUser:= model.GetUserDefaultGroupPermEnum().DENY
defaultTopicPermUser:= model.GetUserDefaultTopicPermEnum().DENY
adminUser:= false
whiteRemoteAddressUser:= ""
secretKeyUser:= "*****"
accessKeyUser:= "user_name"
request.Body = &model.User{
    GroupPerms: &listGroupPermsbody,
    TopicPerms: &listTopicPermsbody,
    DefaultGroupPerm: &defaultGroupPermUser,
    DefaultTopicPerm: &defaultTopicPermUser,
    Admin: &adminUser,
    WhiteRemoteAddress: &whiteRemoteAddressUser,
    SecretKey: &secretKeyUser,
    AccessKey: &accessKeyUser,
}
response, err := client.CreateUser(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         | The creation is successful. |

## Error Codes

See [Error Codes](#).

## 5.5.2 Querying the User List

### Function

This API is used to query the user list.

## Calling Method

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

## URI

GET /v2/{project\_id}/instances/{instance\_id}/users

**Table 5-118** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

**Table 5-119** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                      |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | String | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>1–50<br><b>Default value:</b><br>10         |
| offset    | No        | String | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>$\geq 0$<br><b>Default value:</b><br>N/A |

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-120** Response body parameters

| Parameter | Type                                      | Description                                                                           |
|-----------|-------------------------------------------|---------------------------------------------------------------------------------------|
| users     | Array of <a href="#">UserResp</a> objects | <b>Parameter description:</b><br>User list.                                           |
| total     | Number                                    | <b>Parameter description:</b><br>Total number of users.<br><b>Value range:</b><br>N/A |

**Table 5-121** UserResp

| Parameter                | Type                                         | Description                                                                                                                                                                                                                                                                                                           |
|--------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access_key               | String                                       | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                              |
| secret_key               | String                                       | <b>Parameter description:</b><br>Secret key.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                            |
| white_remote_address     | String                                       | <b>Parameter description:</b><br>IP address whitelist.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                  |
| admin                    | Boolean                                      | <b>Parameter description:</b><br>Whether the user is an administrator.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul>                                                                                                                           |
| default_topic_permission | String                                       | <b>Parameter description:</b><br>Default topic permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB:</b> publish permissions.</li><li>• <b>SUB:</b> subscribe permissions.</li><li>• <b>PUB SUB:</b> subscribe and publish permissions.</li><li>• <b>DENY:</b> no permission.</li></ul> |
| default_group_permission | String                                       | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB:</b> subscribe permissions.</li><li>• <b>DENY:</b> no permission.</li></ul>                                                                                                |
| topic_perms              | Array of <a href="#">topic_perms</a> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                             |

| Parameter   | Type                                         | Description                                                                                        |
|-------------|----------------------------------------------|----------------------------------------------------------------------------------------------------|
| group_perms | Array of <a href="#">group_perms</a> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Value range:</b><br>N/A |

Table 5-122 topic\_perms

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                  |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                   |
| perm      | String | <b>Parameter description:</b><br>Topic permission.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

Table 5-123 group\_perms

| Parameter | Type   | Description                                                                                                                                                                                                    |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Value range:</b><br>N/A                                                                                                                            |
| perm      | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

## Example Requests

Querying the user list

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/users?offset=0&limit=10
```

## Example Responses

**Status code: 200**

Query result.

```
{
  "users" : [ {
    "access_key" : "test_01",
    "admin" : false,
    "default_group_perm" : "DENY",
    "default_topic_perm" : "SUB",
    "group_perms" : [ ],
    "secret_key" : "*****",
    "topic_perms" : [ ],
    "white_remote_address" : ""
  } ],
  "total" : 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListUserSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListUserRequest request = new ListUserRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListUserResponse response = client.listUser(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListUserRequest()
        request.instance_id = "{instance_id}"
        response = client.list_user(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListUserRequest{}
request.InstanceId = "{instance_id}"
response, err := client.ListUser(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         | Query result. |

## Error Codes

See [Error Codes](#).

## 5.5.3 Modifying User Parameters

### Function

This API is used to modify user parameters.

### Calling Method

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

### URI

PUT /v2/{project\_id}/instances/{instance\_id}/users/{user\_name}



Table 5-124 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |
| user_name   | Yes       | String | <b>Parameter description:</b><br>Username.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                 |

## Request Parameters

**Table 5-125** Request body parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access_key | No        | String | <b>Parameter description:</b><br>Username.<br><b>Constraints:</b><br>Starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                                                                                            |
| secret_key | No        | String | <b>Parameter description:</b><br>Secret key.<br><b>Constraints:</b><br>8 to 32 characters.<br>Contain at least three of the following character types: <ul style="list-style-type: none"><li>• Uppercase letters</li><li>• Lowercase letters</li><li>• Digits</li><li>• Special characters`~!@#\$%^&amp;*()-_+=~\ [{]};:'",&lt;.&gt;/?</li></ul> Cannot be the username or the username spelled backwards.<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter            | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| white_remote_address | No        | String  | <b>Parameter description:</b><br>IP address whitelist.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                                                                                                                    |
| admin                | No        | Boolean | <b>Parameter description:</b><br>Whether the user is an administrator.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> yes</li> <li>• <b>false:</b> no</li> </ul> <b>Default value:</b><br>N/A                                                                                                                             |
| default_topic_perm   | No        | String  | <b>Parameter description:</b><br>Default topic permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>pub:</b> publish permissions.</li> <li>• <b>sub:</b> subscribe permissions.</li> <li>• <b>PUB sub:</b> subscribe and publish permissions.</li> <li>• <b>DENY:</b> no permission.</li> </ul> <b>Default value:</b><br>N/A |

| Parameter          | Mandatory | Type                                         | Description                                                                                                                                                                                                                                                                             |
|--------------------|-----------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| default_group_perm | No        | String                                       | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br><ul style="list-style-type: none"> <li>• <b>sub:</b> subscribe permissions.</li> <li>• <b>DENY:</b> no permission.</li> </ul> <b>Default value:</b><br>N/A |
| topic_perms        | No        | Array of <a href="#">topic_perms</a> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                 |
| group_perms        | No        | Array of <a href="#">group_perms</a> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                        |

**Table 5-126** topic\_perms

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String | <b>Parameter description:</b><br>Topic name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                                                                                                                                                                                                     |
| perm      | No        | String | <b>Parameter description:</b><br>Topic permission.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>pub</b>: publish permissions.</li> <li>• <b>sub</b>: subscribe permissions.</li> <li>• <b>PUB sub</b>: subscribe and publish permissions.</li> <li>• <b>DENY</b>: no permission.</li> </ul> <b>Default value:</b><br>N/A |

**Table 5-127** group\_perms

| Parameter | Mandatory | Type   | Description                                                                                                                                       |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                               |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| perm      | No        | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>sub</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> <b>Default value:</b><br>N/A |

## Response Parameters

Status code: 200

**Table 5-128** Response body parameters

| Parameter            | Type    | Description                                                                                                                                                                                 |
|----------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access_key           | String  | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A                                                                                                                    |
| secret_key           | String  | <b>Parameter description:</b><br>Secret key.<br><b>Value range:</b><br>N/A                                                                                                                  |
| white_remote_address | String  | <b>Parameter description:</b><br>IP address whitelist.<br><b>Value range:</b><br>N/A                                                                                                        |
| admin                | Boolean | <b>Parameter description:</b><br>Whether the user is an administrator.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true</b>: yes</li><li>• <b>false</b>: no</li></ul> |

| Parameter          | Type                                         | Description                                                                                                                                                                                                                                                                                                           |
|--------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| default_topic_perm | String                                       | <b>Parameter description:</b><br>Default topic permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |
| default_group_perm | String                                       | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul>                                                                                                |
| topic_perms        | Array of <a href="#">topic_perms</a> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                             |
| group_perms        | Array of <a href="#">group_perms</a> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                    |

**Table 5-129** topic\_perms

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                  |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                   |
| perm      | String | <b>Parameter description:</b><br>Topic permission.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

**Table 5-130** group\_perms

| Parameter | Type   | Description                                                                                                                                                                                                    |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Value range:</b><br>N/A                                                                                                                            |
| perm      | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

## Example Requests

Granting user\_name permissions to publish and subscribe to topic1 and group1

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/users/{user_name}
```

```
{
  "access_key" : "user_name",
  "secret_key" : "*****",
  "white_remote_address" : "",
  "admin" : false,
  "default_topic_perm" : "DENY",
  "default_group_perm" : "DENY",
  "topic_perms" : [ {
    "name" : "topic1",
    "perm" : "PUB|SUB"
  } ],
  "group_perms" : [ {
    "name" : "group1",
    "perm" : "PUB|SUB"
  } ]
}
```

## Example Responses

**Status code: 200**

The modification is successful.

```
{
  "access_key" : "test_01",
  "admin" : false,
  "default_group_perm" : "DENY",
  "default_topic_perm" : "SUB",
  "group_perms" : [ ],
  "secret_key" : "*****",
  "topic_perms" : [ ],
  "white_remote_address" : ""
}
```

## SDK Sample Code

The SDK sample code is as follows.



## Java

### Granting user\_name permissions to publish and subscribe to topic1 and group1

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class UpdateUserSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateUserRequest request = new UpdateUserRequest();
        request.withInstanceId("{instance_id}");
        request.withUserName("{user_name}");
        User body = new User();
        List<UserGroupPerms> listbodyGroupPerms = new ArrayList<>();
        listbodyGroupPerms.add(
            new UserGroupPerms()
                .withName("group1")
                .withPerm(UserGroupPerms.PermEnum.fromValue("PUB|SUB"))
        );
        List<UserTopicPerms> listbodyTopicPerms = new ArrayList<>();
        listbodyTopicPerms.add(
            new UserTopicPerms()
                .withName("topic1")
                .withPerm(UserTopicPerms.PermEnum.fromValue("PUB|SUB"))
        );
        body.withGroupPerms(listbodyGroupPerms);
        body.withTopicPerms(listbodyTopicPerms);
        body.withDefaultGroupPerm(User.DefaultGroupPermEnum.fromValue("DENY"));
        body.withDefaultTopicPerm(User.DefaultTopicPermEnum.fromValue("DENY"));
        body.withAdmin(false);
        body.withWhiteRemoteAddress("");
        body.withSecretKey("*****");
        body.withAccessKey("user_name");
        request.withBody(body);
        try {
            UpdateUserResponse response = client.updateUser(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

### Granting user\_name permissions to publish and subscribe to topic1 and group1

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateUserRequest()
        request.instance_id = "{instance_id}"
        request.user_name = "{user_name}"
        listGroupPermsbody = [
            UserGroupPerms(
                name="group1",
                perm="PUB|SUB"
            )
        ]
        listTopicPermsbody = [
            UserTopicPerms(
                name="topic1",
                perm="PUB|SUB"
            )
        ]
        request.body = User(
            group_perms=listGroupPermsbody,
            topic_perms=listTopicPermsbody,
            default_group_perm="DENY",
            default_topic_perm="DENY",
            admin=False,
            white_remote_address="",
            secret_key="*****",
            access_key="user_name"
        )
        response = client.update_user(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

Granting user\_name permissions to publish and subscribe to topic1 and group1

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateUserRequest{}
    request.InstanceId = "{instance_id}"
    request.UserName = "{user_name}"
    nameGroupPerms := "group1"
    permGroupPerms := model.GetUserGroupPermsPermEnum().PUB|SUB
    var listGroupPermsbody = []model.UserGroupPerms{
        {
            Name: &nameGroupPerms,
            Perm: &permGroupPerms,
        },
    }
    nameTopicPerms := "topic1"
    permTopicPerms := model.GetUserTopicPermsPermEnum().PUB|SUB
    var listTopicPermsbody = []model.UserTopicPerms{
        {
            Name: &nameTopicPerms,
            Perm: &permTopicPerms,
        },
    }
    defaultGroupPermUser := model.GetUserDefaultGroupPermEnum().DENY
    defaultTopicPermUser := model.GetUserDefaultTopicPermEnum().DENY
    adminUser := false
    whiteRemoteAddressUser := ""
    secretKeyUser := "*****"
    accessKeyUser := "user_name"
    request.Body = &model.User{
        GroupPerms: &listGroupPermsbody,
```

```
TopicPerms: &listTopicPermsbody,
DefaultGroupPerm: &defaultGroupPermUser,
DefaultTopicPerm: &defaultTopicPermUser,
Admin: &adminUser,
WhiteRemoteAddress: &whiteRemoteAddressUser,
SecretKey: &secretKeyUser,
AccessKey: &accessKeyUser,
}
response, err := client.UpdateUser(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         | The modification is successful. |

## Error Codes

See [Error Codes](#).

## 5.5.4 Querying User Details

### Function

This API is used to query user details.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/users/{user\_name}

**Table 5-131** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

| Parameter | Mandatory | Type   | Description |
|-----------|-----------|--------|-------------|
| user_name | Yes       | String | Username.   |

## Request Parameters

None

## Response Parameters

Status code: 200

Table 5-132 Response body parameters

| Parameter                | Type    | Description                                                                                                                                                                                                                                                                                                           |
|--------------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| access_key               | String  | <b>Parameter description:</b><br>Username.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                              |
| secret_key               | String  | <b>Parameter description:</b><br>Secret key.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                            |
| white_remote_address     | String  | <b>Parameter description:</b><br>IP address whitelist.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                  |
| admin                    | Boolean | <b>Parameter description:</b><br>Whether the user is an administrator.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> yes</li><li>• <b>false:</b> no</li></ul>                                                                                                                           |
| default_topic_permission | String  | <b>Parameter description:</b><br>Default topic permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB:</b> publish permissions.</li><li>• <b>SUB:</b> subscribe permissions.</li><li>• <b>PUB SUB:</b> subscribe and publish permissions.</li><li>• <b>DENY:</b> no permission.</li></ul> |

| Parameter          | Type                                         | Description                                                                                                                                                                                                            |
|--------------------|----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| default_group_perm | String                                       | <b>Parameter description:</b><br>Default consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |
| topic_perms        | Array of <a href="#">topic_perms</a> objects | <b>Parameter description:</b><br>Special topic permissions.<br><b>Value range:</b><br>N/A                                                                                                                              |
| group_perms        | Array of <a href="#">group_perms</a> objects | <b>Parameter description:</b><br>Special consumer group permissions.<br><b>Value range:</b><br>N/A                                                                                                                     |

**Table 5-133** topic\_perms

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                  |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Topic name.<br><b>Value range:</b><br>N/A                                                                                                                                                                                                                                   |
| perm      | String | <b>Parameter description:</b><br>Topic permission.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>PUB</b>: publish permissions.</li><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>PUB SUB</b>: subscribe and publish permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

**Table 5-134** group\_perms

| Parameter | Type   | Description                                                                                                                                                                                                    |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String | <b>Parameter description:</b><br>Consumer group name.<br><b>Value range:</b><br>N/A                                                                                                                            |
| perm      | String | <b>Parameter description:</b><br>Consumer group permissions.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>SUB</b>: subscribe permissions.</li><li>• <b>DENY</b>: no permission.</li></ul> |

## Example Requests

Querying user details

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/users/{user_name}?offset=0&limit=10
```

## Example Responses

**Status code: 200**

User details queried successfully.

```
{
  "access_key" : "test_01",
  "admin" : false,
  "default_group_perm" : "DENY",
  "default_topic_perm" : "SUB",
  "group_perms" : [ ],
  "secret_key" : "*****",
  "topic_perms" : [ ],
  "white_remote_address" : ""
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowUserSolution {
```

```
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);

    RocketMQClient client = RocketMQClient.newBuilder()
        .withCredential(auth)
        .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowUserRequest request = new ShowUserRequest();
    request.withInstanceId("{instance_id}");
    request.withUserName("{user_name}");
    try {
        ShowUserResponse response = client.showUser(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowUserRequest()
```



```
request.instance_id = "{instance_id}"
request.user_name = "{user_name}"
response = client.show_user(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowUserRequest{}
    request.InstanceId = "{instance_id}"
    request.UserName = "{user_name}"
    response, err := client.ShowUser(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         | User details queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.5.5 Deleting a User

### Function

This API is used to delete a user.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/instances/{instance\_id}/users/{user\_name}

**Table 5-135** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| user_name   | Yes       | String | Username.                                                             |

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-136** Response body parameters

| Parameter | Type   | Description  |
|-----------|--------|--------------|
| message   | String | Information. |

## Example Requests

Deleting a specified user

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}/users/{user_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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class DeleteUserSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteUserRequest request = new DeleteUserRequest();
        request.withInstanceId("{instance_id}");
        request.withUserName("{user_name}");
        try {
            DeleteUserResponse response = client.deleteUser(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = DeleteUserRequest()  
        request.instance_id = "{instance_id}"  
        request.user_name = "{user_name}"  
        response = client.delete_user(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"  
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
    rocketmq.RocketMQClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.DeleteUserRequest{  
    request.InstanceId = "{instance_id}"  
    request.UserName = "{user_name}"  
    response, err := client.DeleteUser(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         | The deletion is successful. |

## Error Codes

See [Error Codes](#).

## 5.5.6 Querying Users Granted Permissions for a Topic

### Function

This API is used to query the list of users that have been granted permissions for a topic.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/topics/{topic}/accesspolicy

**Table 5-137** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| topic       | Yes       | String | Topic name.                                                           |

**Table 5-138** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                         |
|-----------|-----------|--------|-----------------------------------------------------------------------------------------------------|
| offset    | No        | String | Offset, which is the position where the query starts. The value must be greater than or equal to 0. |
| limit     | No        | String | Number of records to query.                                                                         |

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-139** Response body parameters

| Parameter | Type                                      | Description                          |
|-----------|-------------------------------------------|--------------------------------------|
| policies  | Array of <a href="#">policies</a> objects | User list.                           |
| total     | Number                                    | Total number of users.               |
| name      | String                                    | Name of the topic or consumer group. |

**Table 5-140** policies

| Parameter  | Type   | Description |
|------------|--------|-------------|
| access_key | String | Username.   |
| secret_key | String | Key.        |

| Parameter            | Type    | Description                           |
|----------------------|---------|---------------------------------------|
| white_remote_address | String  | IP address whitelist.                 |
| admin                | Boolean | Whether the user is an administrator. |
| perm                 | String  | Permissions.                          |

## Example Requests

Querying the list of users granted permissions for a topic

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics/{topic}/accesspolicy
```

## Example Responses

**Status code: 200**

List of users granted permissions for a topic queried successfully.

```
{
  "policies" : [ ],
  "total" : 0,
  "name" : "test"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListTopicAccessPolicySolution {

    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);
```

```
RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ListTopicAccessPolicyRequest request = new ListTopicAccessPolicyRequest();
request.withInstanceId("{instance_id}");
request.withTopic("{topic}");
try {
    ListTopicAccessPolicyResponse response = client.listTopicAccessPolicy(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListTopicAccessPolicyRequest()
        request.instance_id = "{instance_id}"
        request.topic = "{topic}"
        response = client.list_topic_access_policy(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"
rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListTopicAccessPolicyRequest{}
    request.InstanceId = "{instance_id}"
    request.Topic = "{topic}"
    response, err := client.ListTopicAccessPolicy(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         | List of users granted permissions for a topic queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.5.7 Querying Users Granted Permissions for a Consumer Group

### Function

This API is used to query the list of users that have been granted permissions for a consumer group.

### Calling Method

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

### URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/groups/{group\_id}/accesspolicy

**Table 5-141** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Message engine.                                                       |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |
| group_id    | Yes       | String | Consumer group.                                                       |

**Table 5-142** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                         |
|-----------|-----------|--------|-----------------------------------------------------------------------------------------------------|
| offset    | No        | String | Offset, which is the position where the query starts. The value must be greater than or equal to 0. |
| limit     | No        | String | Number of records to query.                                                                         |

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-143** Response body parameters

| Parameter | Type                                      | Description                          |
|-----------|-------------------------------------------|--------------------------------------|
| policies  | Array of <a href="#">policies</a> objects | User list.                           |
| total     | Number                                    | Total number of users.               |
| name      | String                                    | Name of the topic or consumer group. |

**Table 5-144** policies

| Parameter            | Type    | Description                           |
|----------------------|---------|---------------------------------------|
| access_key           | String  | Username.                             |
| secret_key           | String  | Key.                                  |
| white_remote_address | String  | IP address whitelist.                 |
| admin                | Boolean | Whether the user is an administrator. |
| perm                 | String  | Permissions.                          |

## Example Requests

Querying the list of users granted permissions for a consumer group

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/groups/{group_id}/accesspolicy
```

## Example Responses

**Status code: 200**

List of users granted permissions for a consumer group queried successfully.

```
{
  "policies" : {
    "access_key" : "test_01",
    "secret_key" : "*****",
    "white_remote_address" : "",
    "admin" : false,
    "perm" : ""
  },
  "total" : 1,
  "name" : "test"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListConsumeGroupAccessPolicySolution {

    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);

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

        ListConsumeGroupAccessPolicyRequest request = new ListConsumeGroupAccessPolicyRequest();
        request.withEngine(ListConsumeGroupAccessPolicyRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        request.withGroupId("{group_id}");
        try {
            ListConsumeGroupAccessPolicyResponse response = client.listConsumeGroupAccessPolicy(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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ListConsumeGroupAccessPolicyRequest()
    request.engine = "{engine}"
    request.instance_id = "{instance_id}"
    request.group_id = "{group_id}"
    response = client.list_consume_group_access_policy(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConsumeGroupAccessPolicyRequest{}
    request.Engine = model.GetListConsumeGroupAccessPolicyRequestEngineEnum().ENGINE
    request.InstanceId = "{instance_id}"
    request.GroupId = "{group_id}"
    response, err := client.ListConsumeGroupAccessPolicy(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         | List of users granted permissions for a consumer group queried successfully. |

## Error Codes

See [Error Codes](#).

# 5.6 Metadata Migration

## 5.6.1 Creating a Metadata Migration Task

### Function

This API is used to create a metadata migration task.

### Calling Method

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

### URI

POST /v2/{project\_id}/instances/{instance\_id}/metadata

**Table 5-145** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

**Table 5-146** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                              |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| overwrite | Yes       | String | <b>true</b> : Configurations in the metadata file with the same name as the uploaded file will be overwritten. <b>false</b> : An error is reported when a topic or group already exists. |
| name      | Yes       | String | Migration task name. For details about the naming rules, see the API for creating an instance.                                                                                           |
| type      | Yes       | String | Migration task type. The value can be <b>rocketmq</b> or <b>rabbitToRocket</b> .                                                                                                         |

## Request Parameters

**Table 5-147** Request body parameters

| Parameter              | Mandatory | Type                                            | Description                                                                                                                                                                                                                        |
|------------------------|-----------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| topicConfigTable       | No        | Map<String, MigrationRocketMqTopicConfig>       | RocketMQ instance topic metadata. The topic name is the key and the topic configuration is the value. This parameter is mandatory for <b>rocketmq</b> migration tasks (from self-built RocketMQ instances to DMS for RocketMQ).    |
| subscriptionGroupTable | No        | Map<String, MigrationRocketMqSubscriptionGroup> | RocketMQ consumer group metadata. The consumer group name is the key and the configuration is the value. This parameter is mandatory for <b>rocketmq</b> migration tasks (from self-built RocketMQ instances to DMS for RocketMQ). |

| Parameter | Mandatory | Type                                                             | Description                                                                                                                                                          |
|-----------|-----------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| vhosts    | No        | Array of <a href="#">MigrationRabbitVhostMetadata</a> objects    | RabbitMQ virtual host metadata list. This parameter is mandatory for <b>rabbitToRocket</b> migration tasks (from self-built RabbitMQ instances to DMS for RocketMQ). |
| queues    | No        | Array of <a href="#">MigrationRabbitQueueMetadata</a> objects    | RabbitMQ queue metadata list. This parameter is mandatory for <b>rabbitToRocket</b> migration tasks (from self-built RabbitMQ instances to DMS for RocketMQ).        |
| exchanges | No        | Array of <a href="#">MigrationRabbitExchangeMetadata</a> objects | RabbitMQ exchange metadata list. This parameter is mandatory for <b>rabbitToRocket</b> migration tasks (from self-built RabbitMQ instances to DMS for RocketMQ).     |
| bindings  | No        | Array of <a href="#">MigrationRabbitBindingMetadata</a> objects  | RabbitMQ binding metadata list. This parameter is mandatory for <b>rabbitToRocket</b> migration tasks (from self-built RabbitMQ instances to DMS for RocketMQ).      |

**Table 5-148** MigrationRocketMqTopicConfig

| Parameter          | Mandatory | Type    | Description                                        |
|--------------------|-----------|---------|----------------------------------------------------|
| topicName          | No        | String  | Topic name.                                        |
| topic_name         | No        | String  | Topic name.                                        |
| order              | No        | Boolean | Indicates whether a message is an ordered message. |
| perm               | No        | Integer | Topic permission.                                  |
| readQueueNumbers   | No        | Integer | Number of read queues.                             |
| read_queue_numbers | No        | Integer | Number of read queues.                             |



| Parameter         | Mandatory | Type    | Description                                                                                                                                     |
|-------------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| writeQueueNums    | No        | Integer | Number of write queues.                                                                                                                         |
| write_queue_nums  | No        | Integer | Number of write queues.                                                                                                                         |
| topicFilterType   | No        | String  | Topic filtering type. <ul style="list-style-type: none"><li>• <b>SINGLE_TAG</b>: single tag</li><li>• <b>MULTI_TAG</b>: multiple tags</li></ul> |
| topic_filter_type | No        | String  | Topic filtering type. <ul style="list-style-type: none"><li>• <b>SINGLE_TAG</b>: single tag</li><li>• <b>MULTI_TAG</b>: multiple tags</li></ul> |
| topicSysFlag      | No        | Integer | Topic system flag.                                                                                                                              |
| topic_sys_flag    | No        | Integer | Topic system flag.                                                                                                                              |

**Table 5-149** MigrationRocketMqSubscriptionGroup

| Parameter                      | Mandatory | Type    | Description                                                       |
|--------------------------------|-----------|---------|-------------------------------------------------------------------|
| groupName                      | No        | String  | Consumer group name.                                              |
| group_name                     | No        | String  | Consumer group name.                                              |
| consumeBroadcastEnable         | No        | Boolean | Indicates whether to enable broadcast.                            |
| consume_broadcast_enable       | No        | Boolean | Indicates whether to enable broadcast.                            |
| consumeEnable                  | No        | Boolean | Indicates whether to enable consumption.                          |
| consume_enable                 | No        | Boolean | Indicates whether to enable consumption.                          |
| consumeFromMinEnable           | No        | Boolean | Indicates whether to enable consumption from the earliest offset. |
| consume_from_min_enable        | No        | Boolean | Indicates whether to enable consumption from the earliest offset. |
| notifyConsumerIdsChangedEnable | No        | Boolean | Indicates whether to notify consumer ID changes.                  |

| Parameter                          | Mandatory | Type    | Description                                      |
|------------------------------------|-----------|---------|--------------------------------------------------|
| notify_consumer_ids_changed_enable | No        | Boolean | Indicates whether to notify consumer ID changes. |
| retryMaxTimes                      | No        | Integer | Maximum number of consumption retries.           |
| retry_max_times                    | No        | Integer | Maximum number of consumption retries.           |
| retryQueueNums                     | No        | Integer | Number of retry queues.                          |
| retry_queue_nums                   | No        | Integer | Number of retry queues.                          |
| whichBrokerWhenConsumeSlow         | No        | Long    | ID of the broker selected for slow consumption.  |
| which_broker_when_consume_slow     | No        | Long    | ID of the broker selected for slow consumption.  |

**Table 5-150** MigrationRabbitVhostMetadata

| Parameter | Mandatory | Type   | Description        |
|-----------|-----------|--------|--------------------|
| name      | No        | String | Virtual host name. |

**Table 5-151** MigrationRabbitQueueMetadata

| Parameter | Mandatory | Type    | Description                                   |
|-----------|-----------|---------|-----------------------------------------------|
| vhost     | No        | String  | Virtual host name.                            |
| name      | No        | String  | Queue name.                                   |
| durable   | No        | Boolean | Indicates whether to enable data persistence. |

**Table 5-152** MigrationRabbitExchangeMetadata

| Parameter | Mandatory | Type   | Description        |
|-----------|-----------|--------|--------------------|
| vhost     | No        | String | Virtual host name. |
| name      | No        | String | Switch name.       |

| Parameter | Mandatory | Type    | Description                                   |
|-----------|-----------|---------|-----------------------------------------------|
| type      | No        | String  | Exchange type.                                |
| durable   | No        | Boolean | Indicates whether to enable data persistence. |

**Table 5-153** MigrationRabbitBindingMetadata

| Parameter        | Mandatory | Type   | Description          |
|------------------|-----------|--------|----------------------|
| vhost            | No        | String | Virtual host name.   |
| source           | No        | String | Message source.      |
| destination      | No        | String | Message target.      |
| destination_type | No        | String | Message target type. |
| routing_key      | No        | String | Routing key.         |

## Response Parameters

Status code: 200

**Table 5-154** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| task_id   | String | Task ID.    |

## Example Requests

- Creating a metadata migration task to migrate the metadata from other vendors' or self-built RocketMQ instances to DMS for RocketMQ.

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/metadata?  
overwrite=true&name=task-123&type=rocketmq

```
{
  "topicConfigTable" : {
    "topic-test1" : {
      "order" : false,
      "perm" : 6,
      "readQueueNums" : 3,
      "topicFilterType" : "SINGLE_TAG",
      "topicName" : "topic-test1",
      "topicSysFlag" : 0,
      "writeQueueNums" : 3
    }
  },
  "subscriptionGroupTable" : {
    "group-test1" : {
      "consumeBroadcastEnable" : true,
```

```
"consumeEnable" : true,  
"consumeFromMinEnable" : true,  
"groupName" : "group-test1",  
"notifyConsumerIdsChangedEnable" : true,  
"retryMaxTimes" : 2,  
"retryQueueNums" : 1,  
"whichBrokerWhenConsumeSlow" : 1  
}  
}  
}
```

- Creating a metadata migration task to migrate the metadata of RabbitMQ instances to DMS for RocketMQ.

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/metadata?  
overwrite=true&name=task-123&type=rabbitToRocket

```
{  
  "vhosts" : [ {  
    "name" : "DeleteVhost123"  
  } ],  
  "queues" : [ {  
    "name" : "test-001",  
    "vhost" : "/",  
    "durable" : false  
  } ],  
  "exchanges" : [ {  
    "name" : "direct",  
    "vhost" : "/",  
    "type" : "topic",  
    "durable" : false  
  } ],  
  "bindings" : [ {  
    "source" : "direct",  
    "vhost" : "/",  
    "destination" : "test-001",  
    "destination_type" : "queue",  
    "routing_key" : "test-001"  
  } ]  
}
```

## Example Responses

**Status code: 200**

Successful

```
{  
  "task_id" : "6cf4dcd3-8471-4139-8b5b-8a3a71f704c7"  
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

- Creating a metadata migration task to migrate the metadata from other vendors' or self-built RocketMQ instances to DMS for RocketMQ.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

import java.util.Map;
import java.util.HashMap;

public class CreateRocketMqMigrationTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR_REGION>"))
            .build();
        CreateRocketMqMigrationTaskRequest request = new CreateRocketMqMigrationTaskRequest();
        request.withInstanceId("{instance_id}");
        CreateRocketMqMigrationTaskReq body = new CreateRocketMqMigrationTaskReq();
        MigrationRocketMqSubscriptionGroup subscriptionGroupTableSubscriptionGroupTable = new
        MigrationRocketMqSubscriptionGroup();
        subscriptionGroupTableSubscriptionGroupTable.withGroupName("group-test1")
            .withConsumeBroadcastEnable(true)
            .withConsumeEnable(true)
            .withConsumeFromMinEnable(true)
            .withNotifyConsumerIdsChangedEnable(true)
            .withRetryMaxTimes(2)
            .withRetryQueueNums(1)
            .withWhichBrokerWhenConsumeSlow(1L);
        Map<String, MigrationRocketMqSubscriptionGroup> listbodySubscriptionGroupTable = new
        HashMap<>();
        listbodySubscriptionGroupTable.put("group-test1",
        subscriptionGroupTableSubscriptionGroupTable);
        MigrationRocketMqTopicConfig topicConfigTableTopicConfigTable = new
        MigrationRocketMqTopicConfig();
        topicConfigTableTopicConfigTable.withTopicName("topic-test1")
            .withOrder(false)
            .withPerm(6)
            .withReadQueueNums(3)
            .withWriteQueueNums(3)
            .withTopicFilterType("SINGLE_TAG")
            .withTopicSysFlag(0);
        Map<String, MigrationRocketMqTopicConfig> listbodyTopicConfigTable = new HashMap<>();
        listbodyTopicConfigTable.put("topic-test1", topicConfigTableTopicConfigTable);
        body.withSubscriptionGroupTable(listbodySubscriptionGroupTable);
        body.withTopicConfigTable(listbodyTopicConfigTable);
        request.withBody(body);
        try {
            CreateRocketMqMigrationTaskResponse response =
            client.createRocketMqMigrationTask(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());
    }
}
```

- Creating a metadata migration task to migrate the metadata of RabbitMQ instances to DMS for RocketMQ.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class CreateRocketMqMigrationTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateRocketMqMigrationTaskRequest request = new CreateRocketMqMigrationTaskRequest();
        request.withInstanceId("{instance_id}");
        CreateRocketMqMigrationTaskReq body = new CreateRocketMqMigrationTaskReq();
        List<MigrationRabbitBindingMetadata> listbodyBindings = new ArrayList<>();
        listbodyBindings.add(
            new MigrationRabbitBindingMetadata()
                .withVhost("/")
                .withSource("direct")
                .withDestination("test-001")
                .withDestinationType("queue")
                .withRoutingKey("test-001")
        );
        List<MigrationRabbitExchangeMetadata> listbodyExchanges = new ArrayList<>();
        listbodyExchanges.add(
            new MigrationRabbitExchangeMetadata()
                .withVhost("/")
                .withName("direct")
                .withType("topic")
                .withDurable(false)
        );
        List<MigrationRabbitQueueMetadata> listbodyQueues = new ArrayList<>();
        listbodyQueues.add(
```

```
        new MigrationRabbitQueueMetadata()
            .withVhost("/")
            .withName("test-001")
            .withDurable(false)
    );
    List<MigrationRabbitVhostMetadata> listbodyVhosts = new ArrayList<>();
    listbodyVhosts.add(
        new MigrationRabbitVhostMetadata()
            .withName("DeleteVhost123")
    );
    body.withBindings(listbodyBindings);
    body.withExchanges(listbodyExchanges);
    body.withQueues(listbodyQueues);
    body.withVhosts(listbodyVhosts);
    request.withBody(body);
    try {
        CreateRocketMqMigrationTaskResponse response =
client.createRocketMqMigrationTask(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 metadata migration task to migrate the metadata from other vendors' or self-built RocketMQ instances to DMS for RocketMQ.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateRocketMqMigrationTaskRequest()
        request.instance_id = "{instance_id}"
        subscriptionGroupTableSubscriptionGroupTable = MigrationRocketMqSubscriptionGroup(
            group_name="group-test1",
```

```
        consume_broadcast_enable=True,
        consume_enable=True,
        consume_from_min_enable=True,
        notify_consumer_ids_changed_enable=True,
        retry_max_times=2,
        retry_queue_nums=1,
        which_broker_when_consume_slow=1
    )
    listSubscriptionGroupTablebody = {
        "group-test1": subscriptionGroupTableSubscriptionGroupTable
    }
    topicConfigTableTopicConfigTable = MigrationRocketMqTopicConfig(
        topic_name="topic-test1",
        order=False,
        perm=6,
        read_queue_nums=3,
        write_queue_nums=3,
        topic_filter_type="SINGLE_TAG",
        topic_sys_flag=0
    )
    listTopicConfigTablebody = {
        "topic-test1": topicConfigTableTopicConfigTable
    }
    request.body = CreateRocketMqMigrationTaskReq(
        subscription_group_table=listSubscriptionGroupTablebody,
        topic_config_table=listTopicConfigTablebody
    )
    response = client.create_rocket_mq_migration_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)
```

- Creating a metadata migration task to migrate the metadata of RabbitMQ instances to DMS for RocketMQ.

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateRocketMqMigrationTaskRequest()
        request.instance_id = "{instance_id}"
        listBindingsbody = [
            MigrationRabbitBindingMetadata(
                vhost="/",
```



```
        source="direct",
        destination="test-001",
        destination_type="queue",
        routing_key="test-001"
    )
]
listExchangesbody = [
    MigrationRabbitExchangeMetadata(
        vhost="/",
        name="direct",
        type="topic",
        durable=False
    )
]
listQueuesbody = [
    MigrationRabbitQueueMetadata(
        vhost="/",
        name="test-001",
        durable=False
    )
]
listVhostsbody = [
    MigrationRabbitVhostMetadata(
        name="DeleteVhost123"
    )
]
request.body = CreateRocketMqMigrationTaskReq(
    bindings=listBindingsbody,
    exchanges=listExchangesbody,
    queues=listQueuesbody,
    vhosts=listVhostsbody
)
response = client.create_rocket_mq_migration_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

- Creating a metadata migration task to migrate the metadata from other vendors' or self-built RocketMQ instances to DMS for RocketMQ.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateRocketMqMigrationTaskRequest{}
request.InstanceId = "{instance_id}"
groupNameSubscriptionGroupTable:= "group-test1"
consumeBroadcastEnableSubscriptionGroupTable:= true
consumeEnableSubscriptionGroupTable:= true
consumeFromMinEnableSubscriptionGroupTable:= true
notifyConsumerIdsChangedEnableSubscriptionGroupTable:= true
retryMaxTimesSubscriptionGroupTable:= int32(2)
retryQueueNumsSubscriptionGroupTable:= int32(1)
whichBrokerWhenConsumeSlowSubscriptionGroupTable:= int64(1)
subscriptionGroupTableSubscriptionGroupTable := model.MigrationRocketMqSubscriptionGroup{
    GroupName: &groupNameSubscriptionGroupTable,
    ConsumeBroadcastEnable: &consumeBroadcastEnableSubscriptionGroupTable,
    ConsumeEnable: &consumeEnableSubscriptionGroupTable,
    ConsumeFromMinEnable: &consumeFromMinEnableSubscriptionGroupTable,
    NotifyConsumerIdsChangedEnable: &notifyConsumerIdsChangedEnableSubscriptionGroupTable,
    RetryMaxTimes: &retryMaxTimesSubscriptionGroupTable,
    RetryQueueNums: &retryQueueNumsSubscriptionGroupTable,
    WhichBrokerWhenConsumeSlow: &whichBrokerWhenConsumeSlowSubscriptionGroupTable,
}
var listSubscriptionGroupTablebody = map[string](model.MigrationRocketMqSubscriptionGroup){
    "group-test1": subscriptionGroupTableSubscriptionGroupTable,
}
topicNameTopicConfigTable:= "topic-test1"
orderTopicConfigTable:= false
permTopicConfigTable:= int32(6)
readQueueNumsTopicConfigTable:= int32(3)
writeQueueNumsTopicConfigTable:= int32(3)
topicFilterTypeTopicConfigTable:= "SINGLE_TAG"
topicSysFlagTopicConfigTable:= int32(0)
topicConfigTableTopicConfigTable := model.MigrationRocketMqTopicConfig{
    TopicName: &topicNameTopicConfigTable,
    Order: &orderTopicConfigTable,
    Perm: &permTopicConfigTable,
    ReadQueueNums: &readQueueNumsTopicConfigTable,
    WriteQueueNums: &writeQueueNumsTopicConfigTable,
    TopicFilterType: &topicFilterTypeTopicConfigTable,
    TopicSysFlag: &topicSysFlagTopicConfigTable,
}
var listTopicConfigTablebody = map[string](model.MigrationRocketMqTopicConfig){
    "topic-test1": topicConfigTableTopicConfigTable,
}
request.Body = &model.CreateRocketMqMigrationTaskReq{
    SubscriptionGroupTable: listSubscriptionGroupTablebody,
    TopicConfigTable: listTopicConfigTablebody,
}
response, err := client.CreateRocketMqMigrationTask(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- Creating a metadata migration task to migrate the metadata of RabbitMQ instances to DMS for RocketMQ.

```
package main
```

```
import (
    "fmt"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateRocketMqMigrationTaskRequest{}
    request.InstanceId = "{instance_id}"
    vhostBindings := "/"
    sourceBindings := "direct"
    destinationBindings := "test-001"
    destinationTypeBindings := "queue"
    routingKeyBindings := "test-001"
    var listBindingsbody = []model.MigrationRabbitBindingMetadata{
        {
            Vhost: &vhostBindings,
            Source: &sourceBindings,
            Destination: &destinationBindings,
            DestinationType: &destinationTypeBindings,
            RoutingKey: &routingKeyBindings,
        },
    }
    vhostExchanges := "/"
    nameExchanges := "direct"
    typeExchanges := "topic"
    durableExchanges := false
    var listExchangesbody = []model.MigrationRabbitExchangeMetadata{
        {
            Vhost: &vhostExchanges,
            Name: &nameExchanges,
            Type: &typeExchanges,
            Durable: &durableExchanges,
        },
    }
    vhostQueues := "/"
    nameQueues := "test-001"
    durableQueues := false
    var listQueuesbody = []model.MigrationRabbitQueueMetadata{
        {
            Vhost: &vhostQueues,
            Name: &nameQueues,
            Durable: &durableQueues,
        },
    }
    nameVhosts := "DeleteVhost123"
    var listVhostsbody = []model.MigrationRabbitVhostMetadata{
```

```
{
    Name: &nameVhosts,
},
}
request.Body = &model.CreateRocketMqMigrationTaskReq{
    Bindings: &listBindingsbody,
    Exchanges: &listExchangesbody,
    Queues: &listQueuesbody,
    Vhosts: &listVhostsbody,
}
response, err := client.CreateRocketMqMigrationTask(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         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.6.2 Querying All Migration Tasks or a Specified Migration Task of an Instance

### Function

This API is used to query all migration tasks or a specified migration task of an instance.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/metadata

**Table 5-155** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

**Table 5-156** Query Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                            |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id        | No        | String | Task ID.                                                                                                                                                                                                                                                                                                                                                                               |
| type      | No        | String | Query type.                                                                                                                                                                                                                                                                                                                                                                            |
| offset    | No        | String | Current page number, which starts from 1.                                                                                                                                                                                                                                                                                                                                              |
| limit     | No        | String | Current page size.                                                                                                                                                                                                                                                                                                                                                                     |
| name      | No        | String | <ul style="list-style-type: none"><li>When the vhost list is queried, this field can be left empty.</li><li>When the exchange list is queried, set this field to the name of the vhost to which the exchange belongs.</li><li>When the queue list is queried, set this field to <i>vhost of the queue's exchange-queue's exchange</i>, for example, <b>vhost1-exchange1</b>.</li></ul> |

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-157** Response body parameters

| Parameter | Type    | Description                               |
|-----------|---------|-------------------------------------------|
| total     | Integer | Total number of metadata migration tasks. |

| Parameter | Type                                          | Description                       |
|-----------|-----------------------------------------------|-----------------------------------|
| task      | Array of <a href="#">MetadataTask</a> objects | List of metadata migration tasks. |

**Table 5-158** MetadataTask

| Parameter  | Type   | Description                              |
|------------|--------|------------------------------------------|
| id         | String | ID of a metadata migration task.         |
| name       | String | Name of a metadata migration task.       |
| start_date | String | Start time of a metadata migration task. |
| status     | String | Status of a metadata migration task.     |
| type       | String | Metadata migration type.                 |

## Example Requests

Querying all migration tasks of a RocketMQ instance

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/metadata
```

## Example Responses

**Status code: 200**

Returned status code.

```
{
  "total" : 1,
  "task" : [ {
    "id" : "6cf4dcd3-8471-4139-8b5b-8a3a71f704c7",
    "name" : "task-932331847",
    "start_date" : "2023-03-13 19:43:32.12",
    "status" : "finished",
    "type" : "rabbitToRocket"
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListRocketMqMigrationTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListRocketMqMigrationTaskRequest request = new ListRocketMqMigrationTaskRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListRocketMqMigrationTaskResponse response = client.listRocketMqMigrationTask(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
```

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

try:
    request = ListRocketMqMigrationTaskRequest()
    request.instance_id = "{instance_id}"
    response = client.list_rocket_mq_migration_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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListRocketMqMigrationTaskRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListRocketMqMigrationTask(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         | Returned status code. |

## Error Codes

See [Error Codes](#).

## 5.6.3 Deleting a Metadata Migration Task

### Function

This API is used to delete a metadata migration task.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/instances/{instance\_id}/metadata

**Table 5-159** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

**Table 5-160** Request body parameters

| Parameter | Mandatory | Type             | Description          |
|-----------|-----------|------------------|----------------------|
| task_ids  | Yes       | Array of strings | Tasks to be deleted. |

### Response Parameters

**Status code: 200**

Returned status code.

None

## Example Requests

This API is used to delete a metadata migration task.

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}/metadata
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class DeleteRocketMqMigrationTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteRocketMqMigrationTaskRequest request = new DeleteRocketMqMigrationTaskRequest();
        request.withInstanceId("{instance_id}");
        MetadataDeleteReq body = new MetadataDeleteReq();
        request.withBody(body);
        try {
            DeleteRocketMqMigrationTaskResponse response = client.deleteRocketMqMigrationTask(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteRocketMqMigrationTaskRequest()
        request.instance_id = "{instance_id}"
        request.body = MetadataDeleteReq(
        )
        response = client.delete_rocket_mq_migration_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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DeleteRocketMqMigrationTaskRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.MetadataDeleteReq{
}
response, err := client.DeleteRocketMqMigrationTask(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         | Returned status code. |

## Error Codes

See [Error Codes](#).

# 5.7 Managing Parameters

## 5.7.1 Querying RocketMQ Configurations

### Function

This API is used to query RocketMQ configurations. Configuration details will be returned.

### Calling Method

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

URI

GET /v2/{project\_id}/rocketmq/instances/{instance\_id}/configs

Table 5-161 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-162** Response body parameters

| Parameter        | Type                                                | Description                                                                                 |
|------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------|
| total            | Number                                              | <b>Parameter description:</b><br>Total.<br><b>Value range:</b><br>N/A                       |
| next_offset      | Integer                                             | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>N/A     |
| previous_offset  | Integer                                             | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>N/A |
| rocketmq_configs | Array of <a href="#">RocketMQConfigResp</a> objects | <b>Parameter description:</b><br>RocketMQ configuration.                                    |

**Table 5-163** RocketMQConfigResp

| Parameter   | Type   | Description                                                                                                                                                    |
|-------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | String | <b>Parameter description:</b><br>RocketMQ configuration name.<br><b>Value range:</b><br>N/A                                                                    |
| value       | String | <b>Parameter description:</b><br>RocketMQ configuration current value.<br><b>Value range:</b><br>N/A                                                           |
| config_type | String | <b>Parameter description:</b><br>RocketMQ configuration type.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>dynamic</li> <li>static</li> </ul> |

| Parameter     | Type   | Description                                                                                                                                                        |
|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| default_value | String | <b>Parameter description:</b><br>RocketMQ configuration default value.<br><b>Value range:</b><br>N/A                                                               |
| valid_values  | String | <b>Parameter description:</b><br>RocketMQ configuration value range.<br><b>Value range:</b><br>N/A                                                                 |
| value_type    | String | <b>Parameter description:</b><br>RocketMQ configuration value type.<br><b>Value range:</b> <ul style="list-style-type: none"><li>integer</li><li>boolean</li></ul> |

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/rocketmq/instances/{instance_id}/configs
```

## Example Responses

**Status code: 200**

Successful.

```
{
  "total": 1,
  "next_offset": -1,
  "previous_offset": -1,
  "rocketmq_configs": [ {
    "name": "fileReservedTime",
    "value": 48,
    "config_type": "dynamic",
    "default_value": 48,
    "valid_values": "1~720",
    "value_type": "integer"
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowRocketMqConfigsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRocketMqConfigsRequest request = new ShowRocketMqConfigsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowRocketMqConfigsResponse response = client.showRocketMqConfigs(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
```



```
.with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
.build()

try:
    request = ShowRocketMqConfigsRequest()
    request.instance_id = "{instance_id}"
    response = client.show_rocket_mq_configs(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowRocketMqConfigsRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowRocketMqConfigs(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         | Successful. |

## Error Codes

See [Error Codes](#).

## 5.7.2 Modifying RocketMQ Configurations

### Function

This API is used to modify RocketMQ configurations.

### Calling Method

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

### URI

PUT /v2/{project\_id}/rocketmq/instances/{instance\_id}/configs

**Table 5-164** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

**Table 5-165** Request body parameters

| Parameter        | Mandatory | Type                                               | Description             |
|------------------|-----------|----------------------------------------------------|-------------------------|
| rocketmq_configs | No        | Array of <a href="#">RocketMQConfigReq</a> objects | RocketMQ configuration. |

**Table 5-166** RocketMQConfigReq

| Parameter | Mandatory | Type   | Description                          |
|-----------|-----------|--------|--------------------------------------|
| name      | No        | String | RocketMQ configuration name.         |
| value     | No        | String | RocketMQ configuration target value. |

## Response Parameters

**Status code: 204**

Successful.

None

## Example Requests

Modifying RocketMQ configurations with file retention period changed to 72 hours.

```
PUT https://{endpoint}/v2/{project_id}/rocketmq/instances/{instance_id}/configs
{
  "rocketmq_configs": [ {
    "name": "fileReservedTime",
    "value": 72
  } ]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

### Java

Modifying RocketMQ configurations with file retention period changed to 72 hours.

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

```
public class UpdateRocketMqConfigsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateRocketMqConfigsRequest request = new UpdateRocketMqConfigsRequest();
        request.withInstanceId("{instance_id}");
        ModifyConfigReq body = new ModifyConfigReq();
        List<RocketMQConfigReq> listbodyRocketmqConfigs = new ArrayList<>();
        listbodyRocketmqConfigs.add(
            new RocketMQConfigReq()
                .withName(RocketMQConfigReq.NameEnum.fromValue("fileReservedTime"))
                .withValue("72")
        );
        body.withRocketmqConfigs(listbodyRocketmqConfigs);
        request.withBody(body);
        try {
            UpdateRocketMqConfigsResponse response = client.updateRocketMqConfigs(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

Modifying RocketMQ configurations with file retention period changed to 72 hours.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpdateRocketMqConfigsRequest()
    request.instance_id = "{instance_id}"
    listRocketmqConfigsbody = [
        RocketMQConfigReq(
            name="fileReservedTime",
            value="72"
        )
    ]
    request.body = ModifyConfigReq(
        rocketmq_configs=listRocketmqConfigsbody
    )
    response = client.update_rocket_mq_configs(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

Modifying RocketMQ configurations with file retention period changed to 72 hours.

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateRocketMqConfigsRequest{
        request.InstanceId = "{instance_id}"
```

```
nameRocketmqConfigs:= model.GetRocketMqConfigReqNameEnum().FILE_RESERVED_TIME
valueRocketmqConfigs:= "72"
var listRocketmqConfigsboby = []model.RocketMqConfigReq{
    {
        Name: &nameRocketmqConfigs,
        Value: &valueRocketmqConfigs,
    },
}
request.Body = &model.ModifyConfigReq{
    RocketmqConfigs: &listRocketmqConfigsboby,
}
response, err := client.UpdateRocketMqConfigs(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         | Successful. |

## Error Codes

See [Error Codes](#).

# 5.8 Tag Management

## 5.8.1 Adding or Deleting Instance Tags in Batches

### Function

This API is used to add or delete instance tags in batches.

### Calling Method

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

### URI

POST /v2/{project\_id}/rocketmq/{instance\_id}/tags/action

**Table 5-167** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Parameter description:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Request Parameters

**Table 5-168** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | No        | String | <b>Parameter description:</b><br>Operation.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b> <ul style="list-style-type: none"> <li><b>create:</b> Tags are created.</li> <li><b>delete:</b> Tags are deleted.</li> </ul> <b>Default value:</b><br>N/A |

| Parameter | Mandatory | Type                              | Description                                                                                                             |
|-----------|-----------|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| tags      | No        | Array of <b>TagEntity</b> objects | <b>Parameter description:</b><br>Tag list.<br><b>Constraints:</b><br>A RocketMQ instance can have a maximum of 20 tags. |

**Table 5-169** TagEntity

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | No        | String | <b>Definition:</b><br>Tag key.<br><b>Constraints:</b> <ul style="list-style-type: none"> <li>• Cannot be left blank.</li> <li>• Must be unique for the same instance.</li> <li>• Can contain 1 to 128 characters.</li> <li>• Can contain letters, digits, spaces, and special characters <code>_</code>, <code>:</code>, <code>=</code>, <code>+</code>, <code>-</code>, <code>@</code></li> <li>• Cannot start with <b>sys</b></li> <li>• Cannot start or end with a space.</li> </ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |



| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                            |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value     | No        | String | <b>Definition:</b><br>Tag value.<br><b>Constraints:</b> <ul style="list-style-type: none"> <li>Can contain 0 to 255 characters.</li> <li>Can contain letters, digits, spaces, and special characters _.:=-@</li> <li>Cannot start or end with a space.</li> </ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

## Response Parameters

**Status code: 204**

Tags are successfully added or deleted.

None

## Example Requests

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
POST https://{endpoint}/v2/{project_id}/rocketmq/{instance_id}/tags/action
{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

## Example Responses

None

## SDK Sample Code

The SDK sample code is as follows.

## Java

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class BatchCreateOrDeleteRocketmqTagSolution {

    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);

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

        BatchCreateOrDeleteRocketmqTagRequest request = new BatchCreateOrDeleteRocketmqTagRequest();
        request.withInstanceId("{instance_id}");
        BatchCreateOrDeleteTagReq body = new BatchCreateOrDeleteTagReq();
        List<TagEntity> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new TagEntity()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new TagEntity()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
        body.withAction(BatchCreateOrDeleteTagReq.ActionEnum.fromValue("create"));
        request.withBody(body);
        try {
            BatchCreateOrDeleteRocketmqTagResponse response =
            client.batchCreateOrDeleteRocketmqTag(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 instance tags with tag keys key1 and key2 and tag values value1 and value2

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchCreateOrDeleteRocketmqTagRequest()
        request.instance_id = "{instance_id}"
        listTagsbody = [
            TagEntity(
                key="key1",
                value="value1"
            ),
            TagEntity(
                key="key2",
                value="value2"
            )
        ]
        request.body = BatchCreateOrDeleteTagReq(
            tags=listTagsbody,
            action="create"
        )
        response = client.batch_create_or_delete_rocketmq_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

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
package main
```

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateOrDeleteRocketmqTagRequest{}
    request.InstanceId = "{instance_id}"
    keyTags:= "key1"
    valueTags:= "value1"
    keyTags1:= "key2"
    valueTags1:= "value2"
    var listTagsbody = []model.TagEntity{
        {
            Key: &keyTags,
            Value: &valueTags,
        },
        {
            Key: &keyTags1,
            Value: &valueTags1,
        },
    }
    actionBatchCreateOrDeleteTagReq:= model.GetBatchCreateOrDeleteTagReqActionEnum().CREATE
    request.Body = &model.BatchCreateOrDeleteTagReq{
        Tags: &listTagsbody,
        Action: &actionBatchCreateOrDeleteTagReq,
    }
    response, err := client.BatchCreateOrDeleteRocketmqTag(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         | Tags are successfully added or deleted. |

## Error Codes

See [Error Codes](#).

## 5.8.2 Querying Instance Tags

### Function

This API is used to query instance tags.

### Calling Method

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

### URI

GET /v2/{project\_id}/rocketmq/{instance\_id}/tags

**Table 5-170** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-171** Response body parameters

| Parameter   | Type    | Description              |
|-------------|---------|--------------------------|
| total       | Number  | Total.                   |
| next_offset | Integer | Offset of the next page. |

| Parameter       | Type                       | Description                  |
|-----------------|----------------------------|------------------------------|
| previous_offset | Integer                    | Offset of the previous page. |
| tags            | Array of TagEntity objects | Tag list.                    |

Table 5-172 TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | <b>Definition:</b><br>Tag key.<br><b>Constraints:</b> <ul style="list-style-type: none"><li>• Cannot be left blank.</li><li>• Must be unique for the same instance.</li><li>• Can contain 1 to 128 characters.</li><li>• Can contain letters, digits, spaces, and special characters _.:=-@</li><li>• Cannot start with <i>sys</i></li><li>• Cannot start or end with a space.</li></ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| value     | String | <b>Definition:</b><br>Tag value.<br><b>Constraints:</b> <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters _.:=-@</li><li>• Cannot start or end with a space.</li></ul> <b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                      |

Example Requests

Querying instance tags

```
GET https://{endpoint}/v2/{project_id}/rocketmq/{instance_id}/tags
```

## Example Responses

### Status code: 200

Instance tags queried successfully.

```
{
  "total" : 1,
  "next_offset" : -1,
  "previous_offset" : -1,
  "tags" : [ {
    "key" : "key1",
    "value" : "value1"
  }, {
    "key" : "key2",
    "value" : "value2"
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowRocketmqTagsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRocketmqTagsRequest request = new ShowRocketmqTagsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowRocketmqTagsResponse response = client.showRocketmqTags(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowRocketmqTagsRequest()
        request.instance_id = "{instance_id}"
        response = client.show_rocketmq_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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ShowRocketmqTagsRequest{
    request.InstanceId = "{instance_id}"
}
response, err := client.ShowRocketmqTags(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         | Instance tags queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.8.3 Querying Project Tags

### Function

This API is used to query tags of a project.

### Calling Method

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

### URI

GET /v2/{project\_id}/rocketmq/tags

Table 5-173 Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                        |
|------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Parameter description:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-174 Response body parameters

| Parameter       | Type                                                 | Description                                                                                 |
|-----------------|------------------------------------------------------|---------------------------------------------------------------------------------------------|
| total           | Number                                               | <b>Parameter description:</b><br>Total number.<br><b>Value range:</b><br>N/A                |
| next_offset     | Integer                                              | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>N/A     |
| previous_offset | Integer                                              | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>N/A |
| tags            | Array of <a href="#">TagMultyValueEntity</a> objects | <b>Parameter description:</b><br>Tag list.                                                  |

**Table 5-175** TagMultyValueEntity

| Parameter | Type             | Description                                                             |
|-----------|------------------|-------------------------------------------------------------------------|
| key       | String           | <b>Parameter description:</b><br>Tag key.<br><b>Value range:</b><br>N/A |
| values    | Array of strings | <b>Parameter description:</b><br>Tag value.                             |

## Example Requests

Querying project tags

```
GET https://{endpoint}/v2/{project_id}/rocketmq/tags
```

## Example Responses

**Status code: 200**

The project tags are queried successfully.

```
{
  "total" : 1,
  "next_offset" : -1,
  "previous_offset" : -1,
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value-test", "value1" ]
  }, {
    "key" : "key2",
    "values" : [ "value2" ]
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowRocketmqProjectTagsSolution {

    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);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ShowRocketmqProjectTagsRequest request = new ShowRocketmqProjectTagsRequest();
try {
    ShowRocketmqProjectTagsResponse response = client.showRocketmqProjectTags(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowRocketmqProjectTagsRequest()
        response = client.show_rocketmq_project_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

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowRocketmqProjectTagsRequest{}
    response, err := client.ShowRocketmqProjectTags(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         | The project tags are queried successfully. |

## Error Codes

See [Error Codes](#).

## 5.9 Diagnosing an Instance

### 5.9.1 Creating an Instance Diagnosis Task

#### Function

This API is used to create an instance diagnosis task.

#### Calling Method

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

#### URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/diagnosis

**Table 5-176** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine      | Yes       | String | Engine.                                                                                                                                                                                                                               |
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<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 5-177 Request body parameters

| Parameter    | Mandatory | Type             | Description                                                                                                                      |
|--------------|-----------|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| group_name   | No        | String           | <b>Definition:</b><br>Consumer group name.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| node_id_list | No        | Array of strings | <b>Definition:</b><br>Node ID list.<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

Table 5-178 Response body parameters

| Parameter | Type   | Description                                              |
|-----------|--------|----------------------------------------------------------|
| report_id | String | <b>Definition:</b><br>Report ID.<br><b>Range:</b><br>N/A |

## Example Requests

Creating an instance diagnosis task

```
POST https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/diagnosis
{
  "report_id" : "b00a070e-75e0-4463-b53e-fbc29dcff951"
}
```

## Example Responses

**Status code: 200**

success

```
{
  "group_name" : "test",
  "node_id_list" : [ ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

Creating an instance diagnosis task

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class CreateDiagnosisTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateDiagnosisTaskRequest request = new CreateDiagnosisTaskRequest();
        request.withEngine("{engine}");
        request.withInstanceId("{instance_id}");
        body.withDiagnosisRep("{ \"report_id\": \"b00a070e-75e0-4463-b53e-fbc29dcff951\" }");
        request.withBody(listDiagnosisRepDiagnosisRep);
        try {
            CreateDiagnosisTaskResponse response = client.createDiagnosisTask(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 an instance diagnosis task

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateDiagnosisTaskRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        request.body = listDiagnosisRepDiagnosisRep
        response = client.create_diagnosis_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

### Creating an instance diagnosis task

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateDiagnosisTaskRequest{}
request.Engine = "{engine}"
request.InstanceId = "{instance_id}"
var diagnosisRepDiagnosisRep interface{} = "{\n  \"report_id\": \"b00a070e-75e0-4463-b53e-fbc29dcff951\"\n}"
request.Body = listDiagnosisRepDiagnosisRep
response, err := client.CreateDiagnosisTask(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         | success     |

## Error Codes

See [Error Codes](#).

## 5.9.2 Querying an Instance Diagnosis Report List

### Function

This API is used to query an instance diagnosis report list.

### Calling Method

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

URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/diagnosis

Table 5-179 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine      | Yes       | String | <b>Definition:</b><br>Engine.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                   |
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

Table 5-180 Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <b>Definition:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>≥ 0<br><b>Default Value:</b><br>N/A |
| limit     | No        | Integer | <b>Definition:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A    |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-181 Response body parameters

| Parameter             | Type                                                 | Description                                                          |
|-----------------------|------------------------------------------------------|----------------------------------------------------------------------|
| diagnosis_report_list | Array of <a href="#">DiagnosisReportResp</a> objects | <b>Definition:</b><br>Diagnosis report list.<br><b>Range:</b><br>N/A |

Table 5-182 DiagnosisReportResp

| Parameter         | Type    | Description                                                             |
|-------------------|---------|-------------------------------------------------------------------------|
| report_id         | String  | <b>Definition:</b><br>Report ID.<br><b>Range:</b><br>N/A                |
| group_name        | String  | <b>Definition:</b><br>Consumer group name.<br><b>Range:</b><br>N/A      |
| consumer_nums     | Integer | <b>Definition:</b><br>Number of consumers.<br><b>Range:</b><br>N/A      |
| status            | String  | <b>Definition:</b><br>Status.<br><b>Range:</b><br>N/A                   |
| creat_at          | Long    | <b>Definition:</b><br>Generation time.<br><b>Range:</b><br>N/A          |
| abnormal_item_sum | Integer | <b>Definition:</b><br>Number of abnormal items.<br><b>Range:</b><br>N/A |
| faulted_node_sum  | Integer | <b>Definition:</b><br>Number of abnormal nodes.<br><b>Range:</b><br>N/A |

Example Requests

Querying an instance diagnosis report list

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/diagnosis
```

Example Responses

Status code: 200

success

```
{
  "diagnosis_report_list" : {
    "report_id" : "b00a070e-75e0-4463-b53e-fbc29dcff951",
    "status" : "finished",
    "group_name" : "test",
    "created_at" : "2025-05-28 11:25:58.477",
    "abnormal_item_sum" : 0,
    "faulted_node_sum" : 0
  },
  "total_num" : 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListDiagnosisReportsSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListDiagnosisReportsRequest request = new ListDiagnosisReportsRequest();
        request.withEngine("{engine}");
        request.withInstanceId("{instance_id}");
        try {
            ListDiagnosisReportsResponse response = client.listDiagnosisReports(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListDiagnosisReportsRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        response = client.list_diagnosis_reports(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListDiagnosisReportsRequest{}
request.Engine = "{engine}"
request.InstanceId = "{instance_id}"
response, err := client.ListDiagnosisReports(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         | success     |

## Error Codes

See [Error Codes](#).

## 5.9.3 Deleting Instance Diagnosis Records in Batches

### Function

This API is used to delete instance diagnosis records in batches.

### Calling Method

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

### URI

DELETE /v2/{engine}/{project\_id}/instances/{instance\_id}/diagnosis



Table 5-183 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine      | Yes       | String | <b>Definition:</b><br>Engine.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                   |
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<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 5-184** Request body parameters

| Parameter      | Mandatory | Type             | Description                                                                                                                           |
|----------------|-----------|------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| report_id_list | No        | Array of strings | <b>Definition:</b><br>Diagnosis report ID list.<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**

**Table 5-185** Response body parameters

| Parameter      | Type             | Description                                                             |
|----------------|------------------|-------------------------------------------------------------------------|
| report_id_list | Array of strings | <b>Definition:</b><br>Diagnosis report ID list.<br><b>Range:</b><br>N/A |

## Example Requests

Deleting instance diagnosis records in batches

```
DELETE https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/diagnosis
{
  "report_id_list" : [ "a68bb70a-ac92-4047-b8a6-30612b521624" ]
}
```

## Example Responses

**Status code: 200**

success

```
{
  "report_id_list" : [ "a68bb70a-ac92-4047-b8a6-30612b521624" ]
}
```

## SDK Sample Code

The SDK sample code is as follows.

### Java

#### Deleting instance diagnosis records in batches

```
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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

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

public class BatchDeleteDiagnosisReportSolution {

    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);

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

        BatchDeleteDiagnosisReportRequest request = new BatchDeleteDiagnosisReportRequest();
        request.withEngine("{engine}");
        request.withInstanceId("{instance_id}");
        BatchDeleteDiagnosisReportReq body = new BatchDeleteDiagnosisReportReq();
        List<String> listbodyReportIdList = new ArrayList<>();
        listbodyReportIdList.add("a68bb70a-ac92-4047-b8a6-30612b521624");
        body.withReportIdList(listbodyReportIdList);
        request.withBody(body);
        try {
            BatchDeleteDiagnosisReportResponse response = client.batchDeleteDiagnosisReport(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

### Deleting instance diagnosis records in batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchDeleteDiagnosisReportRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        listReportIdListbody = [
            "a68bb70a-ac92-4047-b8a6-30612b521624"
        ]
        request.body = BatchDeleteDiagnosisReportReq(
            report_id_list=listReportIdListbody
        )
        response = client.batch_delete_diagnosis_report(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 instance diagnosis records in batches

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.BatchDeleteDiagnosisReportRequest{}
request.Engine = "{engine}"
request.InstanceId = "{instance_id}"
var listReportIdListbody = []string{
    "a68bb70a-ac92-4047-b8a6-30612b521624",
}
request.Body = &model.BatchDeleteDiagnosisReportReq{
    ReportIdList: &listReportIdListbody,
}
response, err := client.BatchDeleteDiagnosisReport(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         | success     |

## Error Codes

See [Error Codes](#).

## 5.9.4 Querying an Instance Diagnosis Report

### Function

This API is used to query an instance diagnosis report.

### Calling Method

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

URI

GET /v2/{engine}/{project\_id}/diagnosis/{report\_id}

Table 5-186 Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                       |
|------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine     | Yes       | String | <b>Definition:</b><br>Engine.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                               |
| project_id | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| report_id  | Yes       | String | <b>Definition:</b><br>Report ID.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                            |

Request Parameters

None

Response Parameters

Status code: 200

**Table 5-187** Response body parameters

| Parameter         | Type    | Description                                                                                                                                         |
|-------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| report_id         | String  | <b>Definition:</b><br>Report ID.<br><b>Range:</b><br>N/A                                                                                            |
| group_name        | String  | <b>Definition:</b><br>Consumer group name.<br><b>Range:</b><br>N/A                                                                                  |
| consumer_nums     | Integer | <b>Definition:</b><br>Number of consumers.<br><b>Range:</b><br>N/A                                                                                  |
| status            | String  | <b>Definition:</b><br>Status.<br><b>Range:</b><br>N/A                                                                                               |
| creat_at          | Long    | <b>Definition:</b><br>Generation time.<br><b>Range:</b><br>N/A                                                                                      |
| abnormal_item_sum | Integer | <b>Definition:</b><br>Number of abnormal items.<br><b>Range:</b><br>N/A                                                                             |
| faulted_node_sum  | Integer | <b>Definition:</b><br>Number of abnormal nodes.<br><b>Range:</b><br>N/A                                                                             |
| online            | Boolean | <b>Definition:</b><br>Online or not.<br><b>Range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> Yes</li><li>• <b>false:</b> No</li></ul> |

| Parameter                  | Type             | Description                                                                                                                                                    |
|----------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| message_accumulation       | Integer          | <b>Definition:</b><br>Number of stacked messages.<br><b>Range:</b><br>N/A                                                                                      |
| subscription_consistency   | Boolean          | <b>Definition:</b><br>Subscription consistency.<br><b>Range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> Yes</li><li>• <b>false:</b> No</li></ul> |
| subscriptions              | Array of strings | <b>Definition:</b><br>Subscriber list.<br><b>Range:</b><br>N/A                                                                                                 |
| diagnosis_node_report_list | Array of strings | <b>Definition:</b><br>Diagnosis node report list.<br><b>Range:</b><br>N/A                                                                                      |

## Example Requests

Querying an instance diagnosis report

```
GET https://{endpoint}/v2/{engine}/{project_id}/diagnosis/{report_id}
```

## Example Responses

**Status code: 200**

success

```
{
  "report_id" : "3019dd35-361c-4631-a8d8-3578c0a7d102",
  "group_name" : "test",
  "consumer_nums" : "0",
  "status" : "finished",
  "creat_at" : 1748402725731,
  "abnormal_item_sum" : 1,
  "faulted_node_sum" : 0,
  "online" : false,
  "message_accumulation" : 0,
  "subscription_consistency" : true,
  "subscriptions" : [ ],
  "diagnosis_node_report_list" : [ ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowDiagnosisReportSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowDiagnosisReportRequest request = new ShowDiagnosisReportRequest();
        request.withEngine("{engine}");
        request.withReportId("{report_id}");
        try {
            ShowDiagnosisReportResponse response = client.showDiagnosisReport(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowDiagnosisReportRequest()
    request.engine = "{engine}"
    request.report_id = "{report_id}"
    response = client.show_diagnosis_report(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowDiagnosisReportRequest{
        request.Engine = "{engine}"
        request.ReportId = "{report_id}"
    }
    response, err := client.ShowDiagnosisReport(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         | success     |

## Error Codes

See [Error Codes](#).

## 5.9.5 Querying Stack Information

### Function

This API is used to query stack information.

### Calling Method

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

### URI

GET /v2/{engine}/{project\_id}/diagnosis/stack/{stack\_id}

**Table 5-188** Path Parameters

| Parameter | Mandatory | Type   | Description                                                                                                         |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------|
| engine    | Yes       | String | <b>Definition:</b><br>Engine.<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                                                                                                                                                                       |
|------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| stack_id   | Yes       | String | <b>Definition:</b><br>Stack ID.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                             |

Request Parameters

None

Response Parameters

Status code: 200

Table 5-189 Response body parameters

| Parameter   | Type   | Description                                                      |
|-------------|--------|------------------------------------------------------------------|
| thread_name | String | <b>Definition:</b><br>Thread name.<br><b>Range:</b><br>N/A       |
| stack       | String | <b>Definition:</b><br>Stack information.<br><b>Range:</b><br>N/A |

## Example Requests

Querying stack information

```
GET https://{endpoint}/v2/{engine}/{project_id}/diagnosis/stack/{stack_id}
```

## Example Responses

**Status code: 200**

success

```
{
  "thread_name" : "name",
  "stack" : "xxxxxxxxxxxxxxxx"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowDiagnosisStackSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowDiagnosisStackRequest request = new ShowDiagnosisStackRequest();
        request.withEngine("{engine}");
        request.withStackId("{stack_id}");
        try {
            ShowDiagnosisStackResponse response = client.showDiagnosisStack(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ShowDiagnosisStackRequest()  
        request.engine = "{engine}"  
        request.stack_id = "{stack_id}"  
        response = client.show_diagnosis_stack(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"  
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
    rocketmq.RocketMQClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ShowDiagnosisStackRequest{}
request.Engine = "{engine}"
request.StackId = "{stack_id}"
response, err := client.ShowDiagnosisStack(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         | success     |

## Error Codes

See [Error Codes](#).

# 5.10 Specification Modification Management

## 5.10.1 Querying Product Information for Instance Specification Modification

### Function

This API is used to query the product information for instance specification modification.

### Calling Method

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

## URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/extend

**Table 5-190** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Message engine, which is <b>rocketmq</b> .                            |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

**Table 5-191** Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                         |
|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------|
| type      | No        | String  | Type of a product. <b>advanced</b> : DMS for RocketMQ                                               |
| limit     | No        | Integer | Number of records to be queried.                                                                    |
| offset    | No        | Integer | Offset, which is the position where the query starts. The value must be greater than or equal to 0. |

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-192** Response body parameters

| Parameter       | Type    | Description                  |
|-----------------|---------|------------------------------|
| total           | Number  | Total.                       |
| next_offset     | Integer | Offset of the next page.     |
| previous_offset | Integer | Offset of the previous page. |
| engine          | String  | Message engine.              |



| Parameter | Type                                                             | Description                                         |
|-----------|------------------------------------------------------------------|-----------------------------------------------------|
| versions  | Array of strings                                                 | Versions supported by the message engine.           |
| products  | Array of <a href="#">RocketMQExtendProductInfoEntity</a> objects | Product information for specification modification. |

**Table 5-193** RocketMQExtendProductInfoEntity

| Parameter             | Type                                                                  | Description                                            |
|-----------------------|-----------------------------------------------------------------------|--------------------------------------------------------|
| type                  | String                                                                | Instance type.                                         |
| product_id            | String                                                                | Product ID.                                            |
| ecs_flavor_id         | String                                                                | ECS flavor used by the product.                        |
| billing_code          | String                                                                | Billing mode.                                          |
| arch_types            | Array of strings                                                      | Supported CPU architectures.                           |
| charging_mode         | Array of strings                                                      | Supported billing modes.                               |
| ios                   | Array of <a href="#">RocketMQExtendProductIosEntity</a> objects       | Disk I/O information.                                  |
| properties            | <a href="#">RocketMQExtendProductPropertiesEntity</a> object          | Key-value pair of a feature.                           |
| available_zones       | Array of strings                                                      | AZs where there are available resources.               |
| unavailable_zones     | Array of strings                                                      | AZs where resources are sold out.                      |
| support_features      | Array of <a href="#">RocketMQProductSupportFeaturesEntity</a> objects | Supported features.                                    |
| qingtian_incompatible | Boolean                                                               | Indicates whether the instance is a QingTian instance. |

**Table 5-194** RocketMQExtendProductIosEntity

| Parameter | Type   | Description                |
|-----------|--------|----------------------------|
| io_spec   | String | Storage I/O specification. |

| Parameter         | Type             | Description                              |
|-------------------|------------------|------------------------------------------|
| available_zones   | Array of strings | AZs where there are available resources. |
| type              | String           | I/O type.                                |
| unavailable_zones | Array of strings | AZs where resources are sold out.        |

**Table 5-195** RocketMQExtendProductPropertiesEntity

| Parameter               | Type   | Description                                                  |
|-------------------------|--------|--------------------------------------------------------------|
| max_broker              | String | Maximum number of brokers.                                   |
| max_topic_per_broker    | String | Maximum number of topics that can be created on each broker. |
| max_consumer_per_broker | String | Maximum number of consumers of each broker.                  |
| max_storage_per_node    | String | Maximum storage space of each broker. Unit: GB.              |
| min_broker              | String | Minimum number of brokers.                                   |
| engine_versions         | String | Version of the message engine.                               |
| min_storage_per_node    | String | Minimum storage space of each broker. The unit is GB.        |
| product_alias           | String | Alias of <b>product_id</b> .                                 |

**Table 5-196** RocketMQProductSupportFeaturesEntity

| Parameter  | Type               | Description                  |
|------------|--------------------|------------------------------|
| name       | String             | Feature name.                |
| properties | Map<String,String> | Key-value pair of a feature. |

## Example Requests

Querying the product information for instance modification

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/extend
```

## Example Responses

**Status code: 200**

Product information for instance specification modification queried.

```
{
  "total": 1,
  "next_offset": -1,
  "previous_offset": -1,
  "engine": "rocketmq",
  "versions": [ "4.8.0" ],
  "products": [ {
    "type": "cluster.small",
    "product_id": "c6.4u8g.cluster.small",
    "ecs_flavor_id": "c6.xlarge.2",
    "billing_code": "dms.platinum.c6",
    "arch_types": [ "X86" ],
    "charging_mode": [ "monthly", "hourly" ],
    "ios": [ {
      "io_spec": "dms.physical.storage.high.v2",
      "available_zones": [ "xxx" ],
      "type": "evs",
      "unavailable_zones": [ "xxx" ]
    }, {
      "io_spec": "dms.physical.storage.ultra.v2",
      "available_zones": [ ],
      "type": "evs",
      "unavailable_zones": [ "xxx" ]
    } ],
    "support_features": [ ],
    "properties": {
      "max_broker": "2",
      "max_topic_per_broker": "2000",
      "max_storage_per_node": "30000",
      "max_consumer_per_broker": "2000",
      "min_broker": "1",
      "product_alias": "rocketmq.4u8g.cluster.small",
      "engine_versions": "4.8.0",
      "min_storage_per_node": "300"
    },
    "available_zones": [ "xxx" ],
    "unavailable_zones": [ "xxx" ],
    "qingtian_incompatible": false
  }, {
    "type": "cluster",
    "product_id": "c6.4u8g.cluster",
    "ecs_flavor_id": "s6.xlarge.2",
    "billing_code": "dms.platinum.c6",
    "arch_types": [ "X86" ],
    "charging_mode": [ "monthly", "hourly" ],
    "ios": [ {
      "io_spec": "dms.physical.storage.ultra.v2",
      "available_zones": [ ],
      "type": "evs",
      "unavailable_zones": [ "xxx" ]
    }, {
      "io_spec": "dms.physical.storage.high.v2",
      "available_zones": [ "xxx" ],
      "type": "evs",
      "unavailable_zones": [ "xxx" ]
    } ],
    "support_features": [ ],
    "properties": {
      "max_broker": "10",
      "max_topic_per_broker": "4000",
      "max_storage_per_node": "60000",
      "max_consumer_per_broker": "4000",
      "min_broker": "1",
      "product_alias": "rocketmq.4u8g.cluster",
      "engine_versions": "4.8.0",
      "min_storage_per_node": "300"
    },
    "available_zones": [ "xxx" ],
```

```
"unavailable_zones" : [ "xxx" ],
"qingtian_incompatible" : false
}, {
  "type" : "cluster",
  "product_id" : "c6.8u16g.cluster",
  "ecs_flavor_id" : "c6s.2xlarge.2",
  "billing_code" : "dms.platinum.c6",
  "arch_types" : [ "X86" ],
  "charging_mode" : [ "monthly", "hourly" ],
  "ios" : [ {
    "io_spec" : "dms.physical.storage.high.v2",
    "available_zones" : [ "xxx" ],
    "type" : "evs",
    "unavailable_zones" : [ "xxx" ]
  } ],
  "io_spec" : "dms.physical.storage.ultra.v2",
  "available_zones" : [ ],
  "type" : "evs",
  "unavailable_zones" : [ "xxx" ]
}, {
  "support_features" : [ ],
  "properties" : {
    "max_broker" : "10",
    "max_topic_per_broker" : "8000",
    "max_storage_per_node" : "90000",
    "max_consumer_per_broker" : "8000",
    "min_broker" : "1",
    "product_alias" : "rocketmq.8u16g.cluster",
    "engine_versions" : "4.8.0",
    "min_storage_per_node" : "300"
  },
  "available_zones" : [ "xxx" ],
  "unavailable_zones" : [ "xxx" ],
  "qingtian_incompatible" : false
}, {
  "type" : "cluster",
  "product_id" : "c6.12u24g.cluster",
  "ecs_flavor_id" : "c6s.3xlarge.2",
  "billing_code" : "dms.platinum.c6",
  "arch_types" : [ "X86" ],
  "charging_mode" : [ "monthly", "hourly" ],
  "ios" : [ {
    "io_spec" : "dms.physical.storage.ultra.v2",
    "available_zones" : [ ],
    "type" : "evs",
    "unavailable_zones" : [ "xxx" ]
  } ],
  "io_spec" : "dms.physical.storage.high.v2",
  "available_zones" : [ "xxx" ],
  "type" : "evs",
  "unavailable_zones" : [ "xxx" ]
}, {
  "support_features" : [ ],
  "properties" : {
    "max_broker" : "10",
    "max_topic_per_broker" : "12000",
    "max_storage_per_node" : "90000",
    "max_consumer_per_broker" : "12000",
    "min_broker" : "1",
    "product_alias" : "rocketmq.12u24g.cluster",
    "engine_versions" : "4.8.0",
    "min_storage_per_node" : "300"
  },
  "available_zones" : [ "xxx" ],
  "unavailable_zones" : [ "xxx" ],
  "qingtian_incompatible" : false
}, {
  "type" : "cluster",
  "product_id" : "c6.16u32g.cluster",
```

```
"ecs_flavor_id" : "c6.4xlarge.2",
"billing_code" : "dms.platinum.c6",
"arch_types" : [ "X86" ],
"charging_mode" : [ "monthly", "hourly" ],
"ios" : [ {
  "io_spec" : "dms.physical.storage.high.v2",
  "available_zones" : [ "xxx" ],
  "type" : "evs",
  "unavailable_zones" : [ "xxx" ]
}, {
  "io_spec" : "dms.physical.storage.ultra.v2",
  "available_zones" : [ ],
  "type" : "evs",
  "unavailable_zones" : [ "xxx" ]
} ],
"support_features" : [ ],
"properties" : {
  "max_broker" : "10",
  "max_topic_per_broker" : "16000",
  "max_storage_per_node" : "90000",
  "max_consumer_per_broker" : "16000",
  "min_broker" : "1",
  "product_alias" : "rocketmq.16u32g.cluster",
  "engine_versions" : "4.8.0",
  "min_storage_per_node" : "300"
},
"available_zones" : [ "xxx" ],
"unavailable_zones" : [ "xxx" ],
"qingtian_incompatible" : 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowEngineInstanceExtendProductInfoSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowEngineInstanceExtendProductInfoRequest request = new
ShowEngineInstanceExtendProductInfoRequest();
    request.withEngine("{engine}");
    request.withInstanceId("{instance_id}");
    try {
        ShowEngineInstanceExtendProductInfoResponse response =
client.showEngineInstanceExtendProductInfo(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = ShowEngineInstanceExtendProductInfoRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        response = client.show_engine_instance_extend_product_info(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"
rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowEngineInstanceExtendProductInfoRequest{}
    request.Engine = "{engine}"
    request.InstanceId = "{instance_id}"
    response, err := client.ShowEngineInstanceExtendProductInfo(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         | Product information for instance specification modification queried. |

## Error Codes

See [Error Codes](#).

## 5.10.2 Modifying Instance Specifications

### Function

This API is used to modify instance specifications.

Currently, this API can only be used to modify specifications of pay-per-use instances.

## Calling Method

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

## URI

POST /v2/{engine}/{project\_id}/instances/{instance\_id}/extend

**Table 5-197** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Message engine, which is <b>rocketmq</b> .                            |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

## Request Parameters

**Table 5-198** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| oper_type | Yes       | String | Change type<br>Value range: <ul style="list-style-type: none"><li>• <b>storage</b>: Expand the storage without changing the broker quantity.</li><li>• <b>horizontal</b>: Add brokers without changing the storage space of each broker.</li><li>• <b>vertical</b>: Scale up the broker flavor without changing the broker quantity and storage.</li></ul> |



| Parameter         | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| new_storage_space | No        | Integer | This parameter is valid and mandatory when <b>oper_type</b> is set to <b>storage</b> or <b>horizontal</b> .<br>Instance storage space = Broker quantity × Storage space of each broker. <ul style="list-style-type: none"><li>• If <b>oper_type</b> is set to <b>storage</b>, the number of brokers remains unchanged, and the storage space of each broker must be expanded by at least 100 GB.</li><li>• If <b>oper_type</b> is set to <b>horizontal</b>, the storage space of each broker remains unchanged.</li></ul> |
| new_product_id    | No        | String  | This parameter is valid and mandatory when <b>oper_type</b> is set to <b>vertical</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| new_broker_num    | No        | Integer | Broker quantity.<br>This parameter is mandatory when <b>oper_type</b> is set to <b>horizontal</b> .                                                                                                                                                                                                                                                                                                                                                                                                                       |
| publicip_id       | No        | String  | ID of the EIP bound to the instance.<br>Use commas (,) to separate multiple EIP IDs.<br>This parameter is mandatory when <b>oper_type</b> is <b>horizontal</b> and public access is enabled.                                                                                                                                                                                                                                                                                                                              |

## Response Parameters

Status code: 200

Table 5-199 Response body parameters

| Parameter | Type   | Description                                |
|-----------|--------|--------------------------------------------|
| job_id    | String | ID of the specification modification task. |

## Example Requests

```
POST https://{endpoint}/v2/rocketmq/{project_id}/instances/{instance_id}/extend
{
  "oper_type": "horizontal",
  "new_product_id": "c6.4u8g.cluster"
}
```

## Example Responses

**Status code: 200**

Instance specifications modified.

```
{
  "job_id": "93b94287-728d-4bb1-a158-cb66cb0854e7"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ResizeInstanceSolution {

    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);

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

        ResizeInstanceRequest request = new ResizeInstanceRequest();
        request.withEngine("{engine}");
        request.withInstanceId("{instance_id}");
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewProductId("c6.4u8g.cluster");
        body.withOperType("horizontal");
        request.withBody(body);
        try {
            ResizeInstanceResponse response = client.resizeInstance(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ResizeInstanceRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        request.body = ResizeEngineInstanceReq(
            new_product_id="c6.4u8g.cluster",
            oper_type="horizontal"
        )
        response = client.resize_instance(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeInstanceRequest{}
    request.Engine = "{engine}"
    request.InstanceId = "{instance_id}"
    newProductIdResizeEngineInstanceReq := "c6.4u8g.cluster"
    request.Body = &model.ResizeEngineInstanceReq{
        NewProductId: &newProductIdResizeEngineInstanceReq,
        OperType: "horizontal",
    }
    response, err := client.ResizeInstance(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         | Instance specifications modified. |

## Error Codes

See [Error Codes](#).

# 5.11 Managing Instances

## 5.11.1 Querying an Instance Broker

### Function

This API is used to query instance broker information.

### Calling Method

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

### URI

GET /v2/{project\_id}/{engine}/instances/{instance\_id}/nodes

**Table 5-200** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| engine      | Yes       | String | Engine type.                                                          |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-201** Response body parameters

| Parameter       | Type                                               | Description                  |
|-----------------|----------------------------------------------------|------------------------------|
| next_offset     | Integer                                            | Offset of the next page.     |
| previous_offset | Integer                                            | Offset of the previous page. |
| nodes           | Array of <a href="#">NodeContextEntity</a> objects | Background task ID.          |
| total           | Integer                                            | Total.                       |

**Table 5-202** NodeContextEntity

| Parameter      | Type    | Description             |
|----------------|---------|-------------------------|
| id             | String  | ID                      |
| broker_name    | String  | Broker name.            |
| broker_id      | Integer | Broker ID.              |
| address        | String  | Address.                |
| public_address | String  | Public network address. |

## Example Requests

GET https://{endpoint}/v2/{project\_id}/{engine}/instances/{instance\_id}/nodes

## Example Responses

**Status code: 200**

Successful

```
{
  "total" : 2,
  "next_offset" : -1,
  "previous_offset" : -1,
  "nodes" : [ {
    "id" : "node-1",
    "broker_name" : "broker-name-1",
    "broker_id" : "broker-1",
    "address" : "0.0.0.2",
    "public_address" : "1.0.0.2"
  }, {
    "id" : "node-2",
    "broker_name" : "broker-name-2",
    "broker_id" : "broker-2",
    "address" : "0.0.0.1",
    "public_address" : "1.0.0.1"
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ShowInstanceNodesSolution {
```

```
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);

    RocketMQClient client = RocketMQClient.newBuilder()
        .withCredential(auth)
        .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowInstanceNodesRequest request = new ShowInstanceNodesRequest();
    request.withEngine("{engine}");
    request.withInstanceId("{instance_id}");
    try {
        ShowInstanceNodesResponse response = client.showInstanceNodes(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowInstanceNodesRequest()
```

```
request.engine = "{engine}"
request.instance_id = "{instance_id}"
response = client.show_instance_nodes(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowInstanceNodesRequest{}
    request.Engine = "{engine}"
    request.InstanceId = "{instance_id}"
    response, err := client.ShowInstanceNodes(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         | Successful  |

### Error Codes

See [Error Codes](#).

## 5.11.2 Restarting an Instance

### Function

This API is used to restart an instance.

### Calling Method

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

### URI

POST /v2/{project\_id}/{engine}/instances/{instance\_id}/restart

**Table 5-203** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| engine      | Yes       | String | Engine type.                                                          |
| instance_id | Yes       | String | Instance ID.                                                          |

### Request Parameters

**Table 5-204** Request body parameters

| Parameter | Type             | Description |
|-----------|------------------|-------------|
| nodes     | Array of strings | Node list.  |

### Response Parameters

**Status code: 200**

**Table 5-205** Response body parameters

| Parameter   | Type             | Description  |
|-------------|------------------|--------------|
| instance_id | String           | Instance ID. |
| nodes       | Array of strings | Node list.   |
| result      | String           | Result.      |

## Example Requests

POST https://{endpoint}/v2/{project\_id}/{engine}/instances/{instance\_id}/restart

## Example Responses

**Status code: 200**

Successful

```
{
  "instance_id" : "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
  "nodes" : [ {
    "name" : "broker-0"
  }, {
    "name" : "broker-1"
  }, {
    "name" : "broker-2"
  } ],
  "result" : "success"
}
```

## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.11.3 Modifying SSL of an Instance

### Function

This API is used to modify the SSL configuration of an instance.

### Calling Method

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

URI

POST /v2/{project\_id}/{engine}/instances/{instance\_id}/plain-ssl-switch

Table 5-206 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| engine      | Yes       | String | <b>Definition:</b><br>Engine.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                   |
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<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 5-207** Request body parameters

| Parameter | Mandatory | Type   | Description    |
|-----------|-----------|--------|----------------|
| tls_mode  | No        | String | Protocol mode. |

## Response Parameters

**Status code: 200****Table 5-208** Response body parameters

| Parameter | Type   | Description    |
|-----------|--------|----------------|
| job_id    | String | Task ID.       |
| tls_mode  | String | Protocol mode. |

## Example Requests

```
POST https://{endpoint}/v2/{project_id}/{engine}/instances/{instance_id}/plain-ssl-switch'
{
  "tls_mode" : "ssl"
}
```

## Example Responses

**Status code: 200**

success

```
{
  "job_id" : "8abfa7b3971f12a20197207ea77161af",
  "tls_mode" : "ssl"
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;
```

```
public class ModifyInstanceSslConfigSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ModifyInstanceSslConfigRequest request = new ModifyInstanceSslConfigRequest();
        request.withEngine("{engine}");
        request.withInstanceId("{instance_id}");
        PlainSSLSwitchRep body = new PlainSSLSwitchRep();
        body.withTlsMode("ssl");
        request.withBody(body);
        try {
            ModifyInstanceSslConfigResponse response = client.modifyInstanceSslConfig(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
```

```
.with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
.build()

try:
    request = ModifyInstanceSslConfigRequest()
    request.engine = "{engine}"
    request.instance_id = "{instance_id}"
    request.body = PlainSSLSwitchRep(
        tls_mode="ssl"
    )
    response = client.modify_instance_ssl_config(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ModifyInstanceSslConfigRequest{}
    request.Engine = "{engine}"
    request.InstanceId = "{instance_id}"
    tlsModePlainSslSwitchRep := "ssl"
    request.Body = &model.PlainSslSwitchRep{
        TlsMode: &tlsModePlainSslSwitchRep,
    }
    response, err := client.ModifyInstanceSslConfig(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         | success     |

## Error Codes

See [Error Codes](#).

# 5.12 Managing Background Tasks

## 5.12.1 Querying a Specific Record from Background Tasks

### Function

This API is used to query a specific record from background tasks.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/tasks/{task\_id}

**Table 5-209** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                       |
|------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<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                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| task_id     | Yes       | String | <b>Definition:</b><br>Task ID.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                  |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-210** Response body parameters

| Parameter  | Type                          | Description                                                    |
|------------|-------------------------------|----------------------------------------------------------------|
| task_count | String                        | <b>Definition:</b><br>Number of tasks.<br><b>Range:</b><br>N/A |
| tasks      | Array of <b>tasks</b> objects | <b>Definition:</b><br>Task list.                               |



Table 5-211 tasks

| Parameter  | Type   | Description                                                    |
|------------|--------|----------------------------------------------------------------|
| id         | String | <b>Definition:</b><br>Task ID.<br><b>Range:</b><br>N/A         |
| name       | String | <b>Definition:</b><br>Task name.<br><b>Range:</b><br>N/A       |
| user_name  | String | <b>Definition:</b><br>Username.<br><b>Range:</b><br>N/A        |
| user_id    | String | <b>Definition:</b><br>User ID.<br><b>Range:</b><br>N/A         |
| params     | String | <b>Definition:</b><br>Task parameters.<br><b>Range:</b><br>N/A |
| status     | String | <b>Definition:</b><br>Task status.<br><b>Range:</b><br>N/A     |
| created_at | String | <b>Definition:</b><br>Start time.<br><b>Range:</b><br>N/A      |
| updated_at | String | <b>Definition:</b><br>End time.<br><b>Range:</b><br>N/A        |

Example Requests

GET https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/tasks/{task\_id}

## Example Responses

**Status code: 200**

Successful

```
{
  "task_count" : "1",
  "tasks" : [ {
    "id" : "ff80808272dcc90f0172df1e490f41b0",
    "name" : "bindInstancePublicIp",
    "user_name" : "dms_test",
    "user_id" : "xxxxxxxx93ff484a828144c6xxxxxxxx",
    "params" : "{\"public_ip_id\":\"06a13350-4305-4338-9f0e-6b322bb1413d\", \"public_ip_address\": \"xx.xx.xx.xx\", \"enable_public_ip\": true}",
    "status" : "SUCCESS",
    "created_at" : "2020-06-23T03:00:03.471Z",
    "updated_at" : "2020-06-23T03:00:08.130Z"
  } ]
}
```

## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.12.2 Deleting a Specific Record from Background Tasks

### Function

This API is used to delete a specific record from background tasks.

### Calling Method

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

### URI

DELETE /v2/{project\_id}/instances/{instance\_id}/tasks/{task\_id}

Table 5-212 Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |
| task_id     | Yes       | String | <b>Definition:</b><br>Task ID.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                                                                                  |

Request Parameters

None

Response Parameters

**Status code: 204**

Successful

None

## Example Requests

Deleting a specific record from background tasks

```
DELETE https://{endpoint}/v2/{project_id}/instances/{instance_id}/tasks/{task_id}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class DeleteBackgroundTaskSolution {

    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);

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteBackgroundTaskRequest request = new DeleteBackgroundTaskRequest();
        request.withInstanceId("{instance_id}");
        request.withTaskId("{task_id}");
        try {
            DeleteBackgroundTaskResponse response = client.deleteBackgroundTask(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = DeleteBackgroundTaskRequest()  
        request.instance_id = "{instance_id}"  
        request.task_id = "{task_id}"  
        response = client.delete_background_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"  
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(  
    rocketmq.RocketMQClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.DeleteBackgroundTaskRequest{  
    request.InstanceId = "{instance_id}"  
    request.TaskId = "{task_id}"  
    response, err := client.DeleteBackgroundTask(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         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.12.3 Querying a Background Task List of an Instance

### Function

This API is used to query a background task list of an instance.

### Calling Method

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

### URI

GET /v2/{project\_id}/instances/{instance\_id}/tasks

**Table 5-213** Path Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                           |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | <b>Definition:</b><br>Project ID. For details, see <a href="#">Obtaining a Project ID</a> .<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                                     |
| instance_id | Yes       | String | <b>Definition:</b><br>Instance ID. To obtain it, log in to the RocketMQ console and find the instance ID on the RocketMQ instance details page.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A |

**Table 5-214** Query Parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                             |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| start     | No        | Integer | <b>Definition:</b><br>ID of the task where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>$\geq 0$<br><b>Default Value:</b><br>N/A |

| Parameter  | Mandatory | Type    | Description                                                                                                                                                                      |
|------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit      | No        | Integer | <b>Definition:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A                                          |
| begin_time | No        | String  | <b>Definition:</b><br>Time of a task where the query starts. The format is YYYYMMDDHHmmss.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>≥ 0<br><b>Default Value:</b><br>N/A |
| end_time   | No        | String  | <b>Definition:</b><br>Time of a task where the query ends. The format is YYYYMMDDHHmmss.<br><b>Constraints:</b><br>N/A<br><b>Range:</b><br>N/A<br><b>Default Value:</b><br>N/A   |

Request Parameters

None

Response Parameters

Status code: 200



**Table 5-215** Response body parameters

| Parameter  | Type                          | Description                                                    |
|------------|-------------------------------|----------------------------------------------------------------|
| task_count | String                        | <b>Definition:</b><br>Number of tasks.<br><b>Range:</b><br>N/A |
| tasks      | Array of <b>tasks</b> objects | <b>Definition:</b><br>Task list.                               |

**Table 5-216** tasks

| Parameter | Type   | Description                                                    |
|-----------|--------|----------------------------------------------------------------|
| id        | String | <b>Definition:</b><br>Task ID.<br><b>Range:</b><br>N/A         |
| name      | String | <b>Definition:</b><br>Task name.<br><b>Range:</b><br>N/A       |
| user_name | String | <b>Definition:</b><br>Username.<br><b>Range:</b><br>N/A        |
| user_id   | String | <b>Definition:</b><br>User ID.<br><b>Range:</b><br>N/A         |
| params    | String | <b>Definition:</b><br>Task parameters.<br><b>Range:</b><br>N/A |
| status    | String | <b>Definition:</b><br>Task status.<br><b>Range:</b><br>N/A     |

| Parameter  | Type   | Description                                               |
|------------|--------|-----------------------------------------------------------|
| created_at | String | <b>Definition:</b><br>Start time.<br><b>Range:</b><br>N/A |
| updated_at | String | <b>Definition:</b><br>End time.<br><b>Range:</b><br>N/A   |

## Example Requests

```
'GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/tasks?
start={start}&limit={limit}&begin_time={begin_time}&end_time={end_time}'
```

## Example Responses

**Status code: 200**

Successful

```
{
  "task_count" : "1",
  "tasks" : [ {
    "id" : "ff80808272dcc90f0172df1e490f41b0",
    "name" : "bindInstancePublicIp",
    "user_name" : "dms_test",
    "user_id" : "xxxxxxxx93ff484a828144c6xxxxxxxx",
    "params" : "{\"public_ip_id\":\"06a13350-4305-4338-9f0e-6b322bb1413d\", \"public_ip_address\": \"xx.xx.xx.xx\", \"enable_public_ip\": true}",
    "status" : "SUCCESS",
    "created_at" : "2020-06-23T03:00:03.471Z",
    "updated_at" : "2020-06-23T03:00:08.130Z"
  } ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListBackgroundTasksSolution {
```

```
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);

    RocketMQClient client = RocketMQClient.newBuilder()
        .withCredential(auth)
        .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
        .build();
    ListBackgroundTasksRequest request = new ListBackgroundTasksRequest();
    request.withInstanceId("{instance_id}");
    try {
        ListBackgroundTasksResponse response = client.listBackgroundTasks(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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 = RocketMQClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(RocketMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListBackgroundTasksRequest()
        request.instance_id = "{instance_id}"
        response = client.list_background_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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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 := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBackgroundTasksRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListBackgroundTasks(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         | Successful  |

## Error Codes

See [Error Codes](#).

## 5.13 Other APIs

### 5.13.1 Querying AZ Information

#### Function

This API is used to query the AZ ID for creating an instance.

#### Calling Method

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

#### URI

GET /v2/available-zones

#### Request Parameters

None

#### Response Parameters

Status code: 200

Table 5-217 Response body parameters

| Parameter       | Type                                             | Description                                                               |
|-----------------|--------------------------------------------------|---------------------------------------------------------------------------|
| region_id       | String                                           | <b>Parameter description:</b><br>Region ID.<br><b>Value range:</b><br>N/A |
| available_zones | Array of <a href="#">available_zones</a> objects | <b>Parameter description:</b><br>Array of AZs.                            |

**Table 5-218** available\_zones

| Parameter             | Type    | Description                                                                                                                                                                                 |
|-----------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| soldOut               | Boolean | <b>Parameter description:</b><br>Whether resources are sold out.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> Yes</li> <li>• <b>false:</b> No</li> </ul>    |
| id                    | String  | <b>Parameter description:</b><br>AZ ID.<br><b>Value range:</b><br>N/A                                                                                                                       |
| code                  | String  | <b>Parameter description:</b><br>AZ code.<br><b>Value range:</b><br>N/A                                                                                                                     |
| name                  | String  | <b>Parameter description:</b><br>AZ name.<br><b>Value range:</b><br>N/A                                                                                                                     |
| port                  | String  | <b>Parameter description:</b><br>AZ port.<br><b>Value range:</b><br>N/A                                                                                                                     |
| resource_availability | String  | <b>Parameter description:</b><br>Whether the AZ has available resources.<br><b>Value range:</b><br>N/A                                                                                      |
| default_az            | Boolean | <b>Parameter description:</b><br>Whether the AZ is the default one.<br><b>Value range:</b> <ul style="list-style-type: none"> <li>• <b>true:</b> Yes</li> <li>• <b>false:</b> No</li> </ul> |
| remain_time           | Long    | <b>Parameter description:</b><br>Remaining time.<br><b>Value range:</b><br>N/A                                                                                                              |

| Parameter   | Type    | Description                                                                                                                                                                      |
|-------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ipv6_enable | Boolean | <b>Parameter description:</b><br>Whether IPv6 is supported.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> Yes</li><li>• <b>false:</b> No</li></ul> |

### Example Requests

Querying AZ information

```
GET https://{endpoint}/v2/available-zones?engine=reliability
```

### Example Responses

**Status code: 200**

AZ information queried successfully.

```
{
  "region_id" : "xxx",
  "available_zones" : [ {
    "soldOut" : false,
    "id" : "8c90c2a4e2594c0782faa6b205afeca7",
    "code" : "xxx",
    "name" : "AZ 1",
    "port" : "8002",
    "resource_availability" : "true",
    "default_az" : false,
    "remain_time" : 9223372036854776000,
    "ipv6_enable" : false
  }, {
    "soldOut" : false,
    "id" : "d539378ec1314c85b76fefa3f7071458",
    "code" : "xxx",
    "name" : "AZ 2",
    "port" : "8003",
    "resource_availability" : "true",
    "default_az" : false,
    "remain_time" : 9223372036854776000,
    "ipv6_enable" : false
  }, {
    "soldOut" : false,
    "id" : "9f1c5806706d4c1fb0eb72f0a9b18c77",
    "code" : "xxx",
    "name" : "AZ 3",
    "port" : "443",
    "resource_availability" : "true",
    "default_az" : true,
    "remain_time" : 9223372036854776000,
    "ipv6_enable" : 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListAvailableZonesSolution {

    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");

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

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ListAvailableZonesRequest request = new ListAvailableZonesRequest();
        try {
            ListAvailableZonesResponse response = client.listAvailableZones(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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"]
```



```
credentials = BasicCredentials(ak, sk)

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

try:
    request = ListAvailableZonesRequest()
    response = client.list_available_zones(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"
    rocketmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rocketmq/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")

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

    client := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListAvailableZonesRequest{}
    response, err := client.ListAvailableZones(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         | AZ information queried successfully. |

Error Codes

See [Error Codes](#).

5.13.2 Querying Flavor List

Function

This API is used to query the flavor list of an engine.

Calling Method

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

URI

GET /v2/{engine}/products

Table 5-219 Path Parameters

| Parameter | Mandatory | Type   | Description                                                                                                                               |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| engine    | Yes       | String | <b>Parameter description:</b><br>Engine type.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

Table 5-220 Query Parameters

| Parameter  | Mandatory | Type    | Description                                                                                                                                                 |
|------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type       | Yes       | String  | <b>Parameter description:</b><br>Edition.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                       |
| product_id | Yes       | String  | <b>Parameter description:</b><br>Product ID.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A                    |
| limit      | No        | Integer | <b>Parameter description:</b><br>Number of records to query.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>10     |
| offset     | No        | Integer | <b>Parameter description:</b><br>Offset where the query starts.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>≥ 0<br><b>Default value:</b><br>N/A |

Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-221** Response body parameters

| Parameter       | Type                                  | Description                                                                                      |
|-----------------|---------------------------------------|--------------------------------------------------------------------------------------------------|
| total           | Number                                | <b>Parameter description:</b><br>Total number.<br><b>Value range:</b><br>$\geq 0$                |
| next_offset     | Integer                               | <b>Parameter description:</b><br>Offset of the next page.<br><b>Value range:</b><br>$\geq 0$     |
| previous_offset | Integer                               | <b>Parameter description:</b><br>Offset of the previous page.<br><b>Value range:</b><br>$\geq 0$ |
| engine          | String                                | <b>Parameter description:</b><br>Engine type.<br><b>Value range:</b><br>N/A                      |
| versions        | Array of strings                      | <b>Parameter description:</b><br>Supported versions.                                             |
| products        | Array of <b>ProductEntity</b> objects | <b>Parameter description:</b><br>Instance details.                                               |

**Table 5-222** ProductEntity

| Parameter | Type   | Description                                                                                                                                                                     |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | String | <b>Parameter description:</b><br>Edition.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>single</b>: single-node</li><li>• <b>cluster</b>: cluster</li></ul> |

| Parameter         | Type             | Description                                                                            |
|-------------------|------------------|----------------------------------------------------------------------------------------|
| product_id        | String           | <b>Parameter description:</b><br>Product ID.<br><b>Value range:</b><br>N/A             |
| ecs_flavor_id     | String           | <b>Parameter description:</b><br>ID of an ECS flavor.<br><b>Value range:</b><br>N/A    |
| billing_code      | String           | <b>Parameter description:</b><br>CBC specification code.<br><b>Value range:</b><br>N/A |
| arch_types        | Array of strings | <b>Parameter description:</b><br>Architecture type.                                    |
| charging_mode     | Object           | <b>Parameter description:</b><br>Billing mode.<br><b>Value range:</b><br>N/A           |
| ios               | Object           | <b>Parameter description:</b><br>Supported I/O types.<br><b>Value range:</b><br>N/A    |
| support_features  | Object           | <b>Parameter description:</b><br>Supported features.<br><b>Value range:</b><br>N/A     |
| properties        | Object           | <b>Parameter description:</b><br>Product features.<br><b>Value range:</b><br>N/A       |
| available_zones   | Array of strings | <b>Parameter description:</b><br>Availability zones.                                   |
| unavailable_zones | Array of strings | <b>Parameter description:</b><br>Unavailability zones.                                 |

| Parameter             | Type    | Description                                                                                                                                                                                   |
|-----------------------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| qingtian_incompatible | Boolean | <b>Parameter description:</b><br>Whether the instance is a QingTian one.<br><b>Value range:</b> <ul style="list-style-type: none"><li>• <b>true:</b> Yes</li><li>• <b>false:</b> No</li></ul> |

## Example Requests

```
GET https://{endpoint}/v2/{engine}/products
```

## Example Responses

**Status code: 200**

Successful

```
{
  "total" : 1,
  "next_offset" : -1,
  "previous_offset" : -1,
  "engine" : "rocketmq",
  "versions" : [ ],
  "products" : [ ]
}
```

## 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.rocketmq.v2.region.RocketMQRegion;
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

public class ListEngineProductsSolution {

    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");

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

```
.withSk(sk);

RocketMQClient client = RocketMQClient.newBuilder()
    .withCredential(auth)
    .withRegion(RocketMQRegion.valueOf("<YOUR REGION>"))
    .build();
ListEngineProductsRequest request = new ListEngineProductsRequest();
request.withEngine("{engine}");
try {
    ListEngineProductsResponse response = client.listEngineProducts(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 huaweicloudsdkrocketmq.v2.region.rocketmq_region import RocketMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrocketmq.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"]

    credentials = BasicCredentials(ak, sk)

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

    try:
        request = ListEngineProductsRequest()
        request.engine = "{engine}"
        response = client.list_engine_products(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"
```

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

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

    client := rocketmq.NewRocketMQClient(
        rocketmq.RocketMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListEngineProductsRequest{}
    request.Engine = "{engine}"
    response, err := client.ListEngineProducts(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         | Successful  |

## Error Codes

See [Error Codes](#).

### 5.13.3 Querying vCPUs of a RocketMQ Flavor

#### Function

This API is used to query the number of cores of a RocketMQ flavor.



## Calling Method

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

## URI

GET /v2/rocketmq/products/cores

**Table 5-223** Path Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                     |
|------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| product_id | Yes       | String | <b>Parameter description:</b><br>Product ID.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A        |
| broker_num | Yes       | String | <b>Parameter description:</b><br>Number of brokers.<br><b>Constraints:</b><br>N/A<br><b>Value range:</b><br>N/A<br><b>Default value:</b><br>N/A |

## Request Parameters

None

## Response Parameters

**Status code:** 200

**Table 5-224** Response body parameters

| Parameter | Type    | Description                                                                     |
|-----------|---------|---------------------------------------------------------------------------------|
| core_num  | Integer | <b>Parameter description:</b><br>Number of vCPUs.<br><b>Value range:</b><br>N/A |

## Example Requests

```
GET https://{endpoint}/v2/rocketmq/products/cores?product_id=c6.8u16g.cluster&broker_num=1
```

## Example Responses

**Status code: 200**

Successful

```
{  
  "core_num" : 135  
}
```

## Status Codes

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Codes

See [Error Codes](#).

# 6 Example Applications

---

## 6.1 Creating Topics in Batches

RocketMQ does not provide an API for creating topics in batches. To create topics in batches, their users can only create them one by one by calling an API each time. On the contrary, DMS for RocketMQ provides an API for creating topics in batches in code.

### Prerequisites

- The endpoint of the region where IAM and RocketMQ are deployed has been obtained.
- The RocketMQ instance ID and the project (instance region) ID have been obtained.

### Creating Various Topics in Batches Using a 5.x Huawei Cloud SDK

1. Create a **topics.txt** file for storing information of the topic to be created.  
The file should contain content in the *topic name message type* form. The message types are **NORMAL**, **FIFO**, **DELAY**, and **TRANSACTION**. For example:  
topic-test01 NORMAL  
topic-test02 FIFO  
topic-test02 DELAY  
topic-test02 TRANSACTION  
One line for one topic. You can specify multiple lines as required.
2. Create topics in a batch by calling an API in code.

#### Sample code

Modify the parts in bold to actual values.

```
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.rocketmq.v2.region.RocketMQRegion;
```

```
import com.huaweicloud.sdk.rocketmq.v2.*;
import com.huaweicloud.sdk.rocketmq.v2.model.*;

import java.io.*;
import java.util.List;
import java.util.ArrayList;

public class CreateBatchTopicSolution {
    public static void main(String[] args) throws IOException {
        // 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 = "{CLOUD_SDK_AK}"; //Access key ID. To check the AK, see Obtaining an AK/SK.
        String sk = "{CLOUD_SDK_SK}"; //Secret key. To check the SK, see Obtaining an AK/SK.
        String projectId = "{project_id}"; //Project ID. To check the project ID, see Obtaining a Project ID.

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

        RocketMQClient client = RocketMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RocketMQRegion.valueOf("<YOUR REGION>")) //Region where the project
            // is. See the region by referring to Obtaining a Project ID.
            .build();

        File file = new File("d:/topics.txt"); //The path of the topic file in 1. The file name and patch
        // can be custom.
        FileReader fileReader = new FileReader(file);
        BufferedReader bufferedReader = new BufferedReader(fileReader);
        String str = null;
        List<producer.TopicEntity> list = new ArrayList<>();
        while ((str = bufferedReader.readLine()) != null) {
            String[] topic = str.split(" ");
            list.add(new producer.TopicEntity(topic[0],topic[1]));
        }
        bufferedReader.close();
        CreateTopicOrBatchDeleteTopicRequest request = new
        CreateTopicOrBatchDeleteTopicRequest();
        request.withInstanceId("{instance_id}"); //RocketMQ instance ID
        CreateTopicOrBatchDeleteTopicReq body = new CreateTopicOrBatchDeleteTopicReq();
        for (int i = 0; i < list.size(); i++) {

            body.withMessageType(CreateTopicOrBatchDeleteTopicReq.MessageTypeEnum.fromValue(list.get(i).ge
            tMessageType()));
            body.withName(list.get(i).getName());
            request.withBody(body);
            try {
                CreateTopicOrBatchDeleteTopicResponse response =
                client.createTopicOrBatchDeleteTopic(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());
            }
        }
    }
}
```

```
}  
//TopicEntity.java  
public class TopicEntity {  
    private String name; //Topic name.  
    private String messageType; //Message type.  
  
    public String getName() {  
        return name;  
    }  
  
    public void setName(String name) {  
        this.name = name;  
    }  
    public String getMessageType() {  
        return messageType;  
    }  
  
    public void setMessageType(String messageType) {  
        this.messageType = messageType;  
    }  
  
    public TopicEntity(String name, String messageType) {  
        this.name = name;  
        this.messageType = messageType;  
    }  
}
```

# 7 Permissions and Supported Actions

---

This chapter describes fine-grained permissions management for your DMS for RocketMQ instances. If your HUAWEI ID does not require individual IAM users, you can skip this chapter.

By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies to these groups. The user then inherits permissions from the groups it is a member of. This process is called authorization. After authorization, the user can perform specified operations on cloud resources based on the permissions.

You can grant users permissions by using [roles](#) and [policies](#). Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

## NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all of the permissions required to call all APIs, but IAM users must have the required permissions specifically assigned. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user creates a RocketMQ instance using an API, the user must have been granted permissions that allow the **dms:instance:create** action.

## Supported Actions

DMS for RocketMQ provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permissions:** Statements in a policy that allow or deny certain operations.
- **APIs:** REST APIs that can be called by a user who has been granted specific permissions.

- Actions: Added to a custom policy to control permissions for specific operations.
- IAM projects or enterprise projects: A custom policy can be applied to IAM projects or enterprise projects or both. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM. For details about the differences between IAM and enterprise projects, see [What Are the Differences Between IAM and Enterprise Management?](#)

DMS for RocketMQ supports the actions listed in [Table 7-1](#) in custom policies.

**Table 7-1** DMS for RocketMQ actions

| Permission                             | API                                                                | Action              | IAM Project | Enterprise Project |
|----------------------------------------|--------------------------------------------------------------------|---------------------|-------------|--------------------|
| Creating a Pay-per-Use Instance        | POST /v2/{project_id}/instances                                    | dms:instance:create | √           | √                  |
| Querying the Instance List             | GET /v2/{project_id}/instances                                     | dms:instance:list   | √           | √                  |
| Querying an Instance                   | GET /v2/{project_id}/instances/{instance_id}                       | dms:instance:get    | √           | √                  |
| Deleting an Instance                   | DELETE /v2/{project_id}/instances/{instance_id}                    | dms:instance:delete | √           | √                  |
| Modifying Instance Information         | PUT /v2/{project_id}/instances/{instance_id}                       | dms:instance:modify | √           | √                  |
| Batch Deleting Instances               | POST /v2/{project_id}/instances/action                             | dms:instance:delete | √           | √                  |
| Modifying a Topic                      | PUT /v2/{project_id}/instances/{instance_id}/topics/{topic}        | dms:instance:modify | √           | √                  |
| Querying the Topic Consumer Group List | GET /v2/{project_id}/instances/{instance_id}/topics/{topic}/groups | dms:instance:get    | √           | √                  |

| Permission                                 | API                                                                | Action               | IAM Project | Enterprise Project |
|--------------------------------------------|--------------------------------------------------------------------|----------------------|-------------|--------------------|
| Querying the Number of Messages in a Topic | GET /v2/{project_id}/instances/{instance_id}/topics/{topic}/status | dms:instance: get    | √           | √                  |
| Querying Messages                          | GET /v2/{engine}/{project_id}/instances/{instance_id}/messages     | dms:instance: get    | √           | √                  |
| Creating a User                            | POST /v2/{project_id}/instances/{instance_id}/users                | dms:instance: modify | √           | √                  |
| Querying the User List                     | GET /v2/{project_id}/instances/{instance_id}/users                 | dms:instance: get    | √           | √                  |
| Querying User Details                      | GET /v2/{project_id}/instances/{instance_id}/users/{user_name}     | dms:instance: get    | √           | √                  |



# 8 Historical APIs

## 8.1 API V1

### 8.1.1 APIs for Managing Instances

#### 8.1.1.1 Creating an Instance

##### Function

This API is used to create an instance.

##### Call Method

For details, see [How to Call an API](#).

##### URI

POST /v1.0/{project\_id}/instances

Table 8-1 URI parameters

| Parameter  | Mandatory | Type   | Description                                                           |
|------------|-----------|--------|-----------------------------------------------------------------------|
| project_id | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

##### Request Parameters

None

##### Response Parameters

Status code: 200

**Table 8-2** Response body parameter

| Parameter         | Type    | Description                                                                                                                                                                                                                                                                                                       |
|-------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name              | String  | Instance name.<br>An instance name starts with a letter, consists of 4 to 64 characters, and can contain only letters, digits, underscores (_), and hyphens (-).                                                                                                                                                  |
| description       | String  | Description of an instance.<br>The description supports up to 1024 characters.<br><b>NOTE</b><br>The backslash (\) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character (\) before the characters, for example, \\ and \". |
| engine            | String  | Message engine. Value: <b>reliability</b>                                                                                                                                                                                                                                                                         |
| engine_version    | String  | Version of the message engine. Value: <b>4.8.0</b>                                                                                                                                                                                                                                                                |
| storage_space     | Integer | Storage space.                                                                                                                                                                                                                                                                                                    |
| vpc_id            | String  | VPC ID.<br>To obtain it, log in to the VPC console and view the VPC ID on the VPC details page.                                                                                                                                                                                                                   |
| subnet_id         | String  | Subnet information.<br>To obtain it, log in to VPC console and click the target subnet on the <b>Subnets</b> page. You can view the network ID on the displayed page.                                                                                                                                             |
| security_group_id | String  | Security group which the instance belongs to.<br>To obtain it, log in to the VPC console and view the security group ID on the security group details page.                                                                                                                                                       |

| Parameter         | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| available_zones   | Array of strings | <p>ID of the AZ where instance brokers reside and which has available resources. Obtain the AZ ID by referring to <a href="#">Listing AZ Information</a>.</p> <p>The parameter value cannot be empty or null. Check whether resources exist in the AZs.</p> <p>A RocketMQ instance can be deployed in 1 AZ or at least 3 AZs. When specifying AZs for brokers, use commas (,) to separate multiple AZs.</p>                                                                                                                                                                                                                                                                                                                                                                    |
| product_id        | String           | <p><b>RocketMQ instance flavors.</b></p> <ul style="list-style-type: none"><li>• c6.4u8g.cluster.small: maximum number of topics on each broker: 2,000; maximum number of consumer groups on each broker: 2,000</li><li>• c6.4u8g.cluster: maximum number of topics on each broker: 4,000; maximum number of consumer groups on each broker: 4,000</li><li>• c6.8u16g.cluster: maximum number of topics on each broker: 8,000; maximum number of consumer groups on each broker: 8,000</li><li>• c6.12u24g.cluster: maximum number of topics on each broker: 12,000; maximum number of consumer groups on each broker: 12,000</li><li>• c6.16u32g.cluster: maximum number of topics on each broker: 16,000; maximum number of consumer groups on each broker: 16,000</li></ul> |
| ssl_enable        | Boolean          | <p>Indicates whether to enable SSL-encrypted access.</p> <ul style="list-style-type: none"><li>• <b>true</b>: enable</li><li>• <b>false</b>: disable</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| storage_spec_code | String           | <p>Storage I/O specification.</p> <ul style="list-style-type: none"><li>• dms.physical.storage.high.v2: high I/O disk</li><li>• dms.physical.storage.ultra.v2: ultra-high I/O disk</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Parameter             | Type                   | Description                                                                                                                                                                                                                   |
|-----------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enterprise_project_id | String                 | Indicates the enterprise project ID. This parameter is mandatory for an enterprise project account.                                                                                                                           |
| enable_acl            | Boolean                | Whether access control is enabled.                                                                                                                                                                                            |
| ipv6_enable           | Boolean                | Whether IPv6 is supported. <ul style="list-style-type: none"><li>• <b>true</b>: yes</li><li>• <b>false</b>: no</li></ul>                                                                                                      |
| enable_publicip       | Boolean                | Indicates whether to enable public access. By default, public access is disabled. <ul style="list-style-type: none"><li>• <b>true</b>: enable</li><li>• <b>false</b>: disable</li></ul>                                       |
| publicip_id           | String                 | ID of the elastic IP address (EIP) bound to an instance.<br>Use commas (,) to separate multiple EIP IDs.<br>This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ). |
| broker_num            | Integer                | Number of brokers.                                                                                                                                                                                                            |
| bss_param             | <b>BssParam</b> object | Parameter related to the yearly/monthly billing mode.<br>If this parameter is left blank, the billing mode is pay-per-use by default.<br>If this parameter is not left blank, the billing mode is yearly/monthly.             |

**Table 8-3** BssParam

| Parameter     | Type    | Description                                                                                                                                                                                    |
|---------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| is_auto_renew | Boolean | Indicates whether auto-renewal is enabled.<br>Value range: <ul style="list-style-type: none"><li>• <b>true</b>: Yes</li><li>• <b>false</b>: No</li></ul> By default, auto renewal is disabled. |

| Parameter     | Type    | Description                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| charging_mode | String  | Billing mode.<br>This parameter specifies a payment mode.<br>Value range: <ul style="list-style-type: none"><li>• <b>prePaid</b>: yearly/monthly</li><li>• <b>postPaid</b>: pay-per-use</li></ul> The default value is <b>postPaid</b> .                                                                                                                                        |
| is_auto_pay   | Boolean | Specifies whether the order is automatically or manually paid.<br>Value range: <ul style="list-style-type: none"><li>• <b>true</b>: Yes. The order will be automatically paid.</li><li>• <b>false</b>: No. The order needs to be paid manually.</li></ul> The default value is <b>false</b> .                                                                                   |
| period_type   | String  | Subscription period<br>Value range: <ul style="list-style-type: none"><li>• <b>month</b></li><li>• <b>year</b></li></ul> This parameter is <b>valid and mandatory</b> when <b>chargingMode</b> is set to <b>prePaid</b> .                                                                                                                                                       |
| period_num    | Integer | Number of subscription periods.<br>Value range: <ul style="list-style-type: none"><li>• If <b>periodType</b> is <b>month</b>, the value ranges from <b>1</b> to <b>9</b>.</li><li>• If <b>periodType</b> is <b>year</b>, the value ranges from <b>1</b> to <b>3</b>.</li></ul> This parameter is <b>valid and mandatory</b> when <b>chargingMode</b> is set to <b>prePaid</b> . |

Example Requests

```
POST https://{endpoint}/v1.0/dms/{project_id}/instances
```

Example Response

Status code: 200  
Successfully created.

```
{  
  "instance_id" : "8959ab1c-7n1a-yyb1-a05t-93dfc361b32d"  
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Codes

See [Error Codes](#).

### 8.1.1.2 Querying an Instance

## Function

This API is used to query an instance.

## Call Method

For details, see [How to Call an API](#).

## URI

GET */v1.0/{project\_id}/instances/{instance\_id}*

**Table 8-4** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| instance_id | Yes       | String | Indicates the instance ID.                                            |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 8-5** Response body parameter

| Parameter            | Type             | Description                                                                                                                                                                         |
|----------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                 | String           | Indicates the instance name.                                                                                                                                                        |
| engine               | String           | Engine.                                                                                                                                                                             |
| status               | String           | Status.                                                                                                                                                                             |
| description          | String           | Message description.                                                                                                                                                                |
| type                 | String           | Indicates the instance type. Value: <b>cluster</b> .                                                                                                                                |
| specification        | String           | Indicates the instance specification.                                                                                                                                               |
| engine_version       | String           | Version.                                                                                                                                                                            |
| instance_id          | String           | Indicates the instance ID.                                                                                                                                                          |
| charging_mode        | Integer          | Indicates the billing mode. <b>1</b> : pay-per-use mode; <b>0</b> : yearly/monthly billing.                                                                                         |
| vpc_id               | String           | VPC ID.                                                                                                                                                                             |
| vpc_name             | String           | VPC name.                                                                                                                                                                           |
| created_at           | String           | Indicates the time when an instance is created.<br><br>The time is in the format of timestamp, that is, the offset milliseconds from 1970-01-01 00:00:00 UTC to the specified time. |
| product_id           | String           | Indicates the product ID.                                                                                                                                                           |
| security_group_id    | String           | Indicates the security group ID.                                                                                                                                                    |
| security_group_name  | String           | Indicates the security group name.                                                                                                                                                  |
| subnet_id            | String           | Indicates the subnet ID.                                                                                                                                                            |
| subnet_name          | String           | Indicates the subnet name.                                                                                                                                                          |
| subnet_cidr          | String           | Subnet route. This field is displayed only for RocketMQ 5.x.                                                                                                                        |
| available_zones      | Array of strings | AZ ID list.                                                                                                                                                                         |
| available_zone_names | Array of strings | AZ name list.                                                                                                                                                                       |
| user_id              | String           | User ID.                                                                                                                                                                            |
| user_name            | String           | Indicates the username.                                                                                                                                                             |
| maintain_begin       | String           | Time at which the maintenance time window starts. Format: <i>HH:mm:ss</i> .                                                                                                         |

| Parameter               | Type    | Description                                                                                                                                                                                                             |
|-------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maintain_end            | String  | Time at which the maintenance time window ends. Format: <i>HH:mm:ss</i> .                                                                                                                                               |
| enable_log_collection   | Boolean | Indicates whether log collection is enabled.                                                                                                                                                                            |
| storage_space           | Integer | Storage space, in GB.                                                                                                                                                                                                   |
| used_storage_space      | Integer | Used message storage space. Unit: GB.                                                                                                                                                                                   |
| enable_publicip         | Boolean | Whether to enable public access.                                                                                                                                                                                        |
| publicip_id             | String  | ID of the elastic IP address (EIP) bound to an instance. Use commas (,) to separate multiple EIP IDs. This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ). |
| publicip_address        | String  | Public IP address.                                                                                                                                                                                                      |
| ssl_enable              | Boolean | Whether SSL is enabled.                                                                                                                                                                                                 |
| cross_vpc_info          | String  | Indicates cross-VPC access information.                                                                                                                                                                                 |
| storage_resource_id     | String  | Indicates the storage resource ID.                                                                                                                                                                                      |
| storage_spec_code       | String  | Storage specification code.                                                                                                                                                                                             |
| service_type            | String  | Indicates the service type.                                                                                                                                                                                             |
| storage_type            | String  | Indicates the storage type.                                                                                                                                                                                             |
| extend_times            | Long    | Extension time.                                                                                                                                                                                                         |
| ipv6_enable             | Boolean | Whether IPv6 is enabled.                                                                                                                                                                                                |
| support_features        | String  | Features supported by the instance.                                                                                                                                                                                     |
| disk_encrypted          | Boolean | Indicates whether disk encryption is enabled.                                                                                                                                                                           |
| ces_version             | String  | Indicates the Cloud Eye version.                                                                                                                                                                                        |
| node_num                | Integer | Number of nodes.                                                                                                                                                                                                        |
| new_spec_billing_enable | Boolean | Whether billing based on new specifications is enabled.                                                                                                                                                                 |
| enable_acl              | Boolean | Whether access control is enabled.                                                                                                                                                                                      |
| broker_num              | Integer | Number of nodes (displayed only for RocketMQ 4.8.0).                                                                                                                                                                    |



| Parameter                  | Type                                       | Description                                                                                                                                                |
|----------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dns_enable                 | Boolean                                    | Whether to enable domain name access to an instance. <ul style="list-style-type: none"><li>• <b>true</b>: enable</li><li>• <b>false</b>: disable</li></ul> |
| namesrv_address            | String                                     | Metadata address.                                                                                                                                          |
| namesrv_domain_name        | String                                     | Metadata domain name.                                                                                                                                      |
| broker_address             | String                                     | Service data address.                                                                                                                                      |
| public_namesrv_address     | String                                     | Public network metadata address.                                                                                                                           |
| public_namesrv_domain_name | String                                     | Public metadata domain name.                                                                                                                               |
| public_broker_address      | String                                     | Public network service data address.                                                                                                                       |
| grpc_address               | String                                     | gRPC connection address (displayed only for RocketMQ 5.x).                                                                                                 |
| grpc_domain_name           | String                                     | gRPC connection domain name (displayed only for RocketMQ 5.x).                                                                                             |
| public_grpc_address        | String                                     | Public gRPC connection address (displayed only for RocketMQ 5.x).                                                                                          |
| public_grpc_domain_name    | String                                     | Public gRPC domain name (displayed only for RocketMQ 5.x).                                                                                                 |
| enterprise_project_id      | String                                     | Indicates the enterprise project ID.                                                                                                                       |
| tags                       | Array of <a href="#">TagEntity</a> objects | Indicates the list of tags.                                                                                                                                |
| total_storage_space        | Integer                                    | Total storage space.                                                                                                                                       |
| resource_spec_code         | String                                     | Resource specification.                                                                                                                                    |

**Table 8-6** TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                         |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | Tag key, which: <ul style="list-style-type: none"><li>• Cannot be blank.</li><li>• Must be unique for the same instance.</li><li>• Can contain 1 to 128 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>._:=-@</code></li><li>• Cannot start or end with a space.</li></ul> |
| value     | String | Tag value, which: <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>._:=-@</code></li><li>• Cannot start or end with a space.</li></ul>                                                                          |

## Example Requests

GET `https://{endpoint}/v1.0/dms/{project_id}/instances/{instance_id}`

## Example Response

Status code: 200

Metrics queried successfully.

```
{
  "name" : "reliability-test",
  "engine" : "reliability",
  "status" : "RUNNING",
  "description" : "",
  "type" : "single.basic",
  "specification" : "rocketmq.b1.large.1, 500 tps",
  "engine_version" : "5.x",
  "instance_id" : "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
  "resource_spec_code" : "",
  "charging_mode" : 1,
  "vpc_id" : "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
  "vpc_name" : "vpc-1101840",
  "created_at" : "1636699753874",
  "product_id" : "rocketmq.b1.large.1",
  "security_group_id" : "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
  "security_group_name" : "security_group_test",
  "subnet_id" : "0a0f1fcb-f019-458d-b9e5-301867394d50",
  "subnet_name" : "subnet-test",
  "subnet_cidr" : "192.168.64.0/18",
  "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
  "available_zone_names" : [ "AZ3" ],
  "user_id" : "0b01fbb53600d4671fa8c00673c71260",
  "user_name" : "user_test",
  "maintain_begin" : "02:00:00",
  "maintain_end" : "06:00:00",
  "enable_log_collection" : false,
  "storage_space" : 558,
  "total_storage_space" : 600,
```

```
"used_storage_space" : 28,
"enable_publicip" : true,
"publicip_id" : "83924171-7014-48f0-a6b2-c714e7a090dd",
"publicip_address" : "****",
"ssl_enable" : false,
"cross_vpc_info" : "{\"192.168.93.114\":{\"advertised_ip\":\"192.168.93.114\",\"broker_port\":\"10100\",\"port_id\":\"b3de3981-1f73-4e6f-b35a-78833b783364\",\"namesrv_port\":\"8300\"}}",
"storage_resource_id" : "164bdaef-2e67-4fd5-be8b-a18f91d455a2",
"storage_spec_code" : "dms.physical.storage.ultra.v2",
"service_type" : "advanced",
"storage_type" : "hec",
"enterprise_project_id" : "0",
"extend_times" : 0,
"ipv6_enable" : false,
"support_features" :
"kafka.crossvpc.domain.enable,auto.create.topics.enable,rabbitmq.plugin.management,support.permissive.mode,auto.topic.switch,feature.physerver.kafka.user.manager,kafka.ssl.2way.modify.enable,kafka.new.pod.port,message_trace_enable,features.pod.token.access,log.enable,features.log.collection,max.connections,rabbitmq.manage.support,replica_port_standalone,feature.physerver.kafka.topic.accesspolicy,enable.kafka.quota.monitor,rocketmq.acl,roma_app_enable,support.kafka.producer.ip.enable,new.authinfo.enable,kafka.quota,rabbitmq_run_log_enable,max.ssl.connections,route,message_trace_v2_enable,kafka.config.dynamic.modify.enable,feature.physerver.kafka.topic.modify.enable.topic.quota,kafka.ssl.cert.modify.enable,roma.user.manage.no.support,auto.create.groups.enable,feature.physerver.kafka.pulbic.dynamic,kafka.config.static.modify.enable",
"disk_encrypted" : false,
"ces_version" : "linux,v1,v2,v3,v4",
"new_spec_billing_enable" : true,
"enable_acl" : false,
"namesrv_address" : "192.168.93.114:8100",
"broker_address" : "192.168.64.0/18:10100",
"public_namesrv_address" : "100.85.116.211:8200",
"public_broker_address" : "100.85.116.211:10101",
"grpc_address" : "192.168.93.114:8080",
"public_grpc_address" : "100.85.116.211:8081"
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.1.1.3 Querying the Instance List

#### Function

This API is used to query all instances.

#### Call Method

For details, see [How to Call an API](#).

#### URI

GET `/v1.0/{project_id}/instances`

**Table 8-7** URI parameters

| Parameter  | Mandatory | Type   | Description                                                           |
|------------|-----------|--------|-----------------------------------------------------------------------|
| project_id | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 8-8** Response body parameter

| Parameter    | Type                                              | Description          |
|--------------|---------------------------------------------------|----------------------|
| instances    | Array of <a href="#">ShowInstanceResp</a> objects | Instance list.       |
| instance_num | Integer                                           | Number of instances. |

**Table 8-9** ShowInstanceResp

| Parameter      | Type    | Description                                                                                 |
|----------------|---------|---------------------------------------------------------------------------------------------|
| name           | String  | Indicates the instance name.                                                                |
| engine         | String  | Engine.                                                                                     |
| status         | String  | Status.                                                                                     |
| description    | String  | Message description.                                                                        |
| type           | String  | Indicates the instance type. Value: <b>cluster</b> .                                        |
| specification  | String  | Indicates the instance specification.                                                       |
| engine_version | String  | Version.                                                                                    |
| instance_id    | String  | Indicates the instance ID.                                                                  |
| charging_mode  | Integer | Indicates the billing mode. <b>1</b> : pay-per-use mode; <b>0</b> : yearly/monthly billing. |
| vpc_id         | String  | VPC ID.                                                                                     |
| vpc_name       | String  | VPC name.                                                                                   |

| Parameter             | Type             | Description                                                                                                                                                                                                             |
|-----------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| created_at            | String           | Indicates the time when an instance is created.<br>The time is in the format of timestamp, that is, the offset milliseconds from 1970-01-01 00:00:00 UTC to the specified time.                                         |
| product_id            | String           | Indicates the product ID.                                                                                                                                                                                               |
| security_group_id     | String           | Indicates the security group ID.                                                                                                                                                                                        |
| security_group_name   | String           | Indicates the security group name.                                                                                                                                                                                      |
| subnet_id             | String           | Indicates the subnet ID.                                                                                                                                                                                                |
| subnet_name           | String           | Indicates the subnet name.                                                                                                                                                                                              |
| subnet_cidr           | String           | Subnet route. This field is displayed only for RocketMQ 5.x.                                                                                                                                                            |
| available_zones       | Array of strings | AZ ID list.                                                                                                                                                                                                             |
| available_zone_names  | Array of strings | AZ name list.                                                                                                                                                                                                           |
| user_id               | String           | User ID.                                                                                                                                                                                                                |
| user_name             | String           | Indicates the username.                                                                                                                                                                                                 |
| maintain_begin        | String           | Time at which the maintenance time window starts. Format: <i>HH:mm:ss</i> .                                                                                                                                             |
| maintain_end          | String           | Time at which the maintenance time window ends. Format: <i>HH:mm:ss</i> .                                                                                                                                               |
| enable_log_collection | Boolean          | Indicates whether log collection is enabled.                                                                                                                                                                            |
| storage_space         | Integer          | Storage space, in GB.                                                                                                                                                                                                   |
| used_storage_space    | Integer          | Used message storage space. Unit: GB.                                                                                                                                                                                   |
| enable_publicip       | Boolean          | Whether to enable public access.                                                                                                                                                                                        |
| publicip_id           | String           | ID of the elastic IP address (EIP) bound to an instance. Use commas (,) to separate multiple EIP IDs. This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ). |
| publicip_address      | String           | Public IP address.                                                                                                                                                                                                      |
| ssl_enable            | Boolean          | Whether SSL is enabled.                                                                                                                                                                                                 |

| Parameter                  | Type    | Description                                                                                                                                                |
|----------------------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| cross_vpc_info             | String  | Indicates cross-VPC access information.                                                                                                                    |
| storage_resource_id        | String  | Indicates the storage resource ID.                                                                                                                         |
| storage_spec_code          | String  | Storage specification code.                                                                                                                                |
| service_type               | String  | Indicates the service type.                                                                                                                                |
| storage_type               | String  | Indicates the storage type.                                                                                                                                |
| extend_times               | Long    | Extension time.                                                                                                                                            |
| ipv6_enable                | Boolean | Whether IPv6 is enabled.                                                                                                                                   |
| support_features           | String  | Features supported by the instance.                                                                                                                        |
| disk_encrypted             | Boolean | Indicates whether disk encryption is enabled.                                                                                                              |
| ces_version                | String  | Indicates the Cloud Eye version.                                                                                                                           |
| node_num                   | Integer | Number of nodes.                                                                                                                                           |
| new_spec_billing_enable    | Boolean | Whether billing based on new specifications is enabled.                                                                                                    |
| enable_acl                 | Boolean | Whether access control is enabled.                                                                                                                         |
| broker_num                 | Integer | Number of nodes (displayed only for RocketMQ 4.8.0).                                                                                                       |
| dns_enable                 | Boolean | Whether to enable domain name access to an instance. <ul style="list-style-type: none"><li>• <b>true</b>: enable</li><li>• <b>false</b>: disable</li></ul> |
| namesrv_address            | String  | Metadata address.                                                                                                                                          |
| namesrv_domain_name        | String  | Metadata domain name.                                                                                                                                      |
| broker_address             | String  | Service data address.                                                                                                                                      |
| public_namesrv_address     | String  | Public network metadata address.                                                                                                                           |
| public_namesrv_domain_name | String  | Public metadata domain name.                                                                                                                               |
| public_broker_address      | String  | Public network service data address.                                                                                                                       |
| grpc_address               | String  | gRPC connection address (displayed only for RocketMQ 5.x).                                                                                                 |

| Parameter               | Type                                       | Description                                                       |
|-------------------------|--------------------------------------------|-------------------------------------------------------------------|
| grpc_domain_name        | String                                     | gRPC connection domain name (displayed only for RocketMQ 5.x).    |
| public_grpc_address     | String                                     | Public gRPC connection address (displayed only for RocketMQ 5.x). |
| public_grpc_domain_name | String                                     | Public gRPC domain name (displayed only for RocketMQ 5.x).        |
| enterprise_project_id   | String                                     | Indicates the enterprise project ID.                              |
| tags                    | Array of <a href="#">TagEntity</a> objects | Indicates the list of tags.                                       |
| total_storage_space     | Integer                                    | Total storage space.                                              |
| resource_spec_code      | String                                     | Resource specification.                                           |

**Table 8-10** TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                            |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | Tag key, which: <ul style="list-style-type: none"><li>• Cannot be blank.</li><li>• Must be unique for the same instance.</li><li>• Can contain 1 to 128 characters.</li><li>• Can contain letters, digits, spaces, and special characters _.:=-@</li><li>• Cannot start or end with a space.</li></ul> |
| value     | String | Tag value, which: <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters _.:=-@</li><li>• Cannot start or end with a space.</li></ul>                                                                          |

## Example Requests

```
GET https://{endpoint}/v1.0/dms/{project_id}/instances
```

## Example Response

Status code: 200

Metrics queried successfully.

```

{
  "instances": [ {
    "name": "reliability-ztest",
    "engine": "reliability",
    "status": "RUNNING",
    "description": "",
    "type": "cluster",
    "specification": "c6.4u8g.cluster * 1 broker",
    "engine_version": "4.8.0",
    "instance_id": "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
    "resource_spec_code": "",
    "charging_mode": 1,
    "vpc_id": "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
    "vpc_name": "vpc-1101840",
    "created_at": "1636699753874",
    "product_id": "c6.4u8g.cluster",
    "security_group_id": "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
    "security_group_name": "Sys-default",
    "subnet_id": "0a0f1fcb-f019-458d-b9e5-301867394d50",
    "available_zones": [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
    "available_zone_names": [ "AZ3" ],
    "user_id": "0b01fbb53600d4671fa8c00673c71260",
    "user_name": "",
    "maintain_begin": "02:00:00",
    "maintain_end": "06:00:00",
    "enable_log_collection": false,
    "storage_space": 558,
    "total_storage_space": 600,
    "used_storage_space": 28,
    "enable_publicip": false,
    "ssl_enable": false,
    "cross_vpc_info": "{\n  \"192.168.1.21\":{\n    \"advertised_ip\": \"192.168.1.21\", \"broker_port\": \"-\", \"port_id\n\": \"fa020857-d899-497c-a5f8-8dd90ed67ff7\", \"namesrv_port\": \"8301\", \"192.168.1.246\":{\n    \"advertised_ip\n\": \"192.168.1.246\", \"broker_port\": \"10100\", \"port_id\": \"c0f0586f-a4ee-41b5-a7f1-b4e554bbf12d\n\", \"namesrv_port\": \"-\", \"192.168.1.77\":{\n    \"advertised_ip\": \"192.168.1.77\", \"broker_port\n\": \"10101\", \"port_id\": \"8eb1d144-4315-402f-8498-37c9a10b630c\", \"namesrv_port\": \"-\"-\n\", \"192.168.1.159\":{\n    \"advertised_ip\": \"192.168.1.159\", \"broker_port\": \"-\", \"port_id\": \"d35b22af-\na202-4329-bda4-26e1bdf2aa8e\", \"namesrv_port\": \"8300\", \"192.168.1.14\":{\n    \"advertised_ip\n\": \"192.168.1.14\", \"broker_port\": \"10102\", \"port_id\": \"5fcb50fd-3af5-4123-a455-a67f1b926026\", \"namesrv_port\": \"-\"-\"}}\",
    \"storage_resource_id\": \"164bdaef-2e67-4fd5-be8b-a18f91d455a2\",
    \"storage_spec_code\": \"dms.physical.storage.ultra.v2\",
    \"service_type\": \"advanced\",
    \"storage_type\": \"hec\",
    \"enterprise_project_id\": \"0\",
    \"extend_times\": 0,
    \"ipv6_enable\": false,
    \"support_features\":
\"kafka.crossvpc.domain.enable,feature.physerver.kafka.topic.accesspolicy,rabbitmq.plugin.management,rocketmq.acl,roma_app_enable,auto_topic_switch,feature.physerver.kafka.user.manager,enable.new.authinfo,route,kafka.config.dynamic.modify.enable,kafka.new.pod.port,feature.physerver.kafka.topic.modify,message_trace_enable,features.pod.token.access,kafka.ssl.cert.modify.enable,roma.user.manage.no.support,feature.physerver.kafka.public.dynamic.features.log.collection,kafka.config.static.modify.enable\",
    \"disk_encrypted\": false,
    \"ces_version\": \"linux,v1,v2\",
    \"node_num\": 5,
    \"new_spec_billing_enable\": true,
    \"broker_num\": 1,
    \"namesrv_address\": \"****\",
    \"broker_address\": \"****\",
    \"public_namesrv_address\": \"****\",
    \"public_broker_address\": \"****\",
    \"grpc_address\": \"****\",
    \"public_grpc_address\": \"****\"
  }
},
  \"instance_num\": 1
}

```



## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.1.1.4 Modifying an Instance

## Function

This API is used to modify an instance.

## Call Method

For details, see [How to Call an API](#).

## URI

PUT */v1.0/{project\_id}/instances/{instance\_id}*

**Table 8-11** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| instance_id | Yes       | String | Indicates the instance ID.                                            |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

None

## Response Parameters

None

## Example Requests

```
PUT https://{endpoint}/v1.0/dms/{project_id}/instances/{instance_id}
```

## Example Response

None

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.1.1.5 Deleting an Instance

## Function

This API is used to delete an instance.

## Call Method

For details, see [How to Call an API](#).

## URI

DELETE /v1.0/{*project\_id*}/instances/{*instance\_id*}

**Table 8-12** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| instance_id | Yes       | String | Indicates the instance ID.                                            |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

None

## Response Parameters

None

## Example Requests

```
DELETE https://{endpoint}/v1.0/dms/{project_id}/instances/{instance_id}
```

## Example Response

None

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

## 8.1.2 Other APIs

### 8.1.2.1 Querying Availability Zones

#### Function

This API is used to query availability zones.

#### Call Method

For details, see [How to Call an API](#).

#### URI

GET /v1.0/availableZones

#### Request Parameters

None

#### Response Parameters

Status code: 200

**Table 8-13** Response body parameter

| Parameter       | Type                                             | Description              |
|-----------------|--------------------------------------------------|--------------------------|
| region_id       | String                                           | Indicates the region ID. |
| available_zones | Array of <a href="#">available_zones</a> objects | Array of AZs.            |

Table 8-14 available\_zones

| Parameter             | Type    | Description                                      |
|-----------------------|---------|--------------------------------------------------|
| soldOut               | Boolean | Indicates whether resources are sold out.        |
| id                    | String  | Indicates the ID of an AZ.                       |
| code                  | String  | Indicates the code of an AZ.                     |
| name                  | String  | Indicates the name of an AZ.                     |
| port                  | String  | Indicates the port number of an AZ.              |
| resource_availability | String  | Indicates whether an AZ has available resources. |
| default_az            | Boolean | Whether the AZ is the default AZ.                |
| remain_time           | Long    | Remaining time.                                  |
| ipv6_enable           | Boolean | Whether IPv6 is supported.                       |

Example Requests

GET https://{endpoint}/v1.0/availableZones

Example Response

Status code: 200

Metrics queried successfully.

```
{
  "region_id" : "xxx",
  "available_zones" : [ {
    "soldOut" : false,
    "id" : "8c90c2a4e2594c0782faa6b205afeca7",
    "code" : "xxx",
    "name" : "AZ 1",
    "port" : "8002",
    "resource_availability" : "true",
    "default_az" : false,
    "remain_time" : 9223372036854776000,
    "ipv6_enable" : false
  }, {
    "soldOut" : false,
    "id" : "d539378ec1314c85b76fefa3f7071458",
    "code" : "xxx",
    "name" : "AZ 2",
    "port" : "8003",
    "resource_availability" : "true",
    "default_az" : false,
    "remain_time" : 9223372036854776000,
    "ipv6_enable" : false
  }, {
    "soldOut" : false,
    "id" : "9f1c5806706d4c1fb0eb72f0a9b18c77",
    "code" : "xxx",
    "name" : "AZ 3",
    "port" : "443",
```

```
"resource_availability" : "true",  
"default_az" : true,  
"remain_time" : 9223372036854776000,  
"ipv6_enable" : false  
} ]  
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.1.2.2 Querying Quotas

## Function

This API is used to query quotas.

## Call Method

For details, see [How to Call an API](#).

## URI

GET /v1.0/{*project\_id*}/quotas/dms

**Table 8-15** URI parameter

| Parameter  | Mandatory | Type   | Description                                                           |
|------------|-----------|--------|-----------------------------------------------------------------------|
| project_id | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

## Request

None.

## Response

Status code: 200

**Table 8-16** Response body parameter

| Parameter | Type                 | Description        |
|-----------|----------------------|--------------------|
| quotas    | <b>quotas</b> object | Quota information. |

**Table 8-17** quotas

| Parameter | Type                                        | Description |
|-----------|---------------------------------------------|-------------|
| resources | Array of <b>QuotaResourceEntity</b> objects | Quota list. |

**Table 8-18** QuotaResourceEntity

| Parameter | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | String  | Values: <b>rabbitmqInstance</b> , <b>kafkaInstance</b> , <b>rocketmqInstance</b> , and <b>tags</b> <ul style="list-style-type: none"><li>• <b>rabbitmqInstance</b> indicates the RabbitMQ instance quota.</li><li>• <b>kafkaInstance</b> indicates the Kafka instance quota.</li><li>• <b>rocketmqInstance</b> indicates the RocketMQ instance quota.</li><li>• <b>tags</b> indicates the tag quota.</li></ul> |
| quota     | Integer | The maximum number of instances that a tenant can create, or the maximum number of tags that can be created for each instance.                                                                                                                                                                                                                                                                                 |
| used      | Integer | Number of created instances.                                                                                                                                                                                                                                                                                                                                                                                   |

## Example Request

```
GET https://{endpoint}/v1.0/{project_id}/quotas/dms
```

## Example Response

Status code: 200

Metrics queried successfully.

```
{
  "quotas": {
    "resources": [ {
      "type": "rabbitmqInstance",
```

```
{
  "quota" : 100,
  "used" : 3
}, {
  "type" : "kafkaInstance",
  "quota" : 100,
  "used" : 17
}, {
  "type" : "rocketmqInstance",
  "quota" : 100,
  "used" : 17
}, {
  "type" : "tags",
  "quota" : 20
}
}
```

Status Code

| Status Code | Description                   |
|-------------|-------------------------------|
| 200         | Metrics queried successfully. |

Error Code

See [Error Codes](#).

8.1.2.3 Querying RocketMQ Instance Monitoring Dimensions

Function

This API is used to query RocketMQ instance monitoring dimensions.

Call Method

For details, see [How to Call an API](#).

URI

GET /v1.0/{project\_id}/instances/{instance\_id}/ceshierarchy

Table 8-19 URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| instance_id | Yes       | String | Instance ID.                                                          |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |

Request

None.

## Response

Status code: 200

**Table 8-20** Response body parameters

| Parameter    | Type                                          | Description                 |
|--------------|-----------------------------------------------|-----------------------------|
| dimensions   | Object                                        | Monitoring dimensions.      |
| instance_ids | Array of <a href="#">instance_ids</a> objects | Instance information.       |
| nodes        | Array of <a href="#">nodes</a> objects        | Broker information.         |
| queues       | Array of <a href="#">queues</a> objects       | Topic information.          |
| groups       | Array of <a href="#">groups</a> objects       | Consumer group information. |

**Table 8-21** instance\_ids

| Parameter | Type   | Description  |
|-----------|--------|--------------|
| name      | String | Instance ID. |

**Table 8-22** nodes

| Parameter | Type   | Description  |
|-----------|--------|--------------|
| name      | String | Broker name. |

**Table 8-23** queues

| Parameter  | Type                                        | Description     |
|------------|---------------------------------------------|-----------------|
| name       | String                                      | Topic name.     |
| partitions | Array of <a href="#">partitions</a> objects | Partition list. |



**Table 8-24** partitions

| Parameter | Type   | Description     |
|-----------|--------|-----------------|
| name      | String | Partition name. |

**Table 8-25** groups

| Parameter | Type                           | Description          |
|-----------|--------------------------------|----------------------|
| name      | String                         | Consumer group name. |
| queues    | Array of <b>queues</b> objects | Topic information.   |

**Table 8-26** queues

| Parameter  | Type                               | Description            |
|------------|------------------------------------|------------------------|
| name       | String                             | Topic name.            |
| partitions | Array of <b>partitions</b> objects | Partition information. |

**Table 8-27** partitions

| Parameter | Type   | Description     |
|-----------|--------|-----------------|
| name      | String | Partition name. |

## Example Request

```
GET https://{endpoint}/v1.0/{project_id}/instances/{instance_id}/ceshierarchy
```

## Example Response

Status code: 200

Metrics queried successfully.

```
{
  "dimensions": [ {
    "name": "kafka_instance_id",
    "metrics": [ "current_partitions", "current_topics", "group_messages" ],
    "key_name": [ "instance_ids" ],
    "dim_router": [ "kafka_instance_id" ]
  }, {
    "name": "kafka_broker",
    "metrics": [ "broker_data_size", "broker_messages_in_rate", "broker_bytes_out_rate",
"broker_bytes_in_rate", "broker_produce_mean", "broker_fetch_mean" ],
    "key_name": [ "nodes" ],
    "dim_router": [ "kafka_instance_id", "kafka_broker" ]
  }
]
```

```
{
  "name": "kafka_rest",
  "metrics": [ "rest_produce_success", "rest_produce_failed", "rest_produce_latency",
"rest_produce_msg_num", "rest_produce_flow", "rest_consume_success", "rest_consume_failed",
"rest_consume_latency", "rest_consume_msg_num", "rest_consume_flow", "rest_commit_success",
"rest_commit_failed", "rest_commit_latency", "rest_commit_msg_num", "rest_commit_flow" ],
  "key_name": [ "nodes" ],
  "dim_router": [ "kafka_instance_id", "kafka_rest" ]
}, {
  "name": "kafka_topics",
  "metrics": [ "topic_data_size", "topic_messages_in_rate", "topic_bytes_out_rate", "topic_bytes_in_rate",
"topic_messages" ],
  "key_name": [ "queues" ],
  "dim_router": [ "kafka_instance_id", "kafka_topics" ],
  "children": [ {
    "name": "kafka_partitions",
    "metrics": [ "produced_messages", "partition_messages" ],
    "key_name": [ "queues", "partitions" ],
    "dim_router": [ "kafka_instance_id", "kafka_topics", "kafka_partitions" ]
  } ]
}, {
  "name": "kafka_groups_partitions",
  "metrics": [ "messages_consumed", "messages_remained" ],
  "key_name": [ "groups", "queues", "partitions" ],
  "dim_router": [ "kafka_instance_id", "kafka_groups", "kafka_groups_topics", "kafka_groups_partitions" ]
}],
"instance_ids": [ {
  "name": "68f3f6a0-3741-453b-bda9-a6ff6b5bb6f7"
} ],
"nodes": [ {
  "name": "broker-0"
}, {
  "name": "broker-1"
}, {
  "name": "broker-2"
} ],
"queues": [ {
  "name": "aaaa",
  "partitions": [ {
    "name": "0"
  } ]
} ],
{
  "name": "mytest",
  "partitions": [ {
    "name": "0"
  }, {
    "name": "1"
  }, {
    "name": "2"
  } ]
}, {
  "name": "topic-84234378",
  "partitions": [ {
    "name": "0"
  }, {
    "name": "1"
  }, {
    "name": "2"
  } ]
}],
"groups": [ {
  "name": "test-consumer-group",
  "queues": [ {
    "name": "mytest",
    "partitions": [ {
      "name": "0"
    }, {
      "name": "1"
    }, {

```

```
    "name" : "2"  
  } ]  
} ]  
} ]  
}
```

## Status Code

| Status Code | Description                   |
|-------------|-------------------------------|
| 200         | Metrics queried successfully. |

## Error Code

See [Error Codes](#).

### 8.1.2.4 Querying Product Flavors

## Function

This API is used to query product flavors.

## Call Method

For details, see [How to Call an API](#).

## URI

GET /v1.0/products

**Table 8-28** Query parameters

| Parameter   | Mandatory | Type   | Description               |
|-------------|-----------|--------|---------------------------|
| instance_id | Yes       | String | Instance ID.              |
| product_id  | Yes       | String | Indicates the product ID. |

## Request

None.

## Response

Status code: 200

**Table 8-29** Response body parameters

| Parameter | Type                                  | Description           |
|-----------|---------------------------------------|-----------------------|
| engine    | String                                | Engine type.          |
| versions  | Array of strings                      | Supported versions.   |
| products  | Array of <b>ProductEntity</b> objects | Product details list. |

**Table 8-30** ProductEntity

| Parameter             | Type             | Description                                                  |
|-----------------------|------------------|--------------------------------------------------------------|
| type                  | String           | Product type, which can be <b>single</b> or <b>cluster</b> . |
| product_id            | String           | Indicates the product ID.                                    |
| ecs_flavor_id         | String           | ECS flavor ID.                                               |
| billing_code          | String           | CBC specification code.                                      |
| arch_types            | Array of strings | Architecture types.                                          |
| charging_mode         | Object           | Billing mode.                                                |
| ios                   | Object           | Supported I/O type.                                          |
| support_features      | Object           | Supported features.                                          |
| properties            | Object           | Features.                                                    |
| available_zones       | Array of strings | Availability zones.                                          |
| unavailable_zones     | Array of strings | Unavailability zones.                                        |
| qingtian_incompatible | Boolean          | Whether the instance is a QingTian instance.                 |

**Example Request**

GET https://{endpoint}/v1.0/products

**Example Response**

Status code: 200

Metrics queried successfully.

```
{
  "engine" : "rocketmq",
  "versions" : [ ],
  "products" : [ ]
}
```

## Status Code

| Status Code | Description                   |
|-------------|-------------------------------|
| 200         | Metrics queried successfully. |

## Error Code

See [Error Codes](#).

## 8.2 API V2

### 8.2.1 Instance Management

#### 8.2.1.1 Querying an Instance

##### Function

This API is used to query the details about an instance.

##### Call Method

For details, see [How to Call an API](#).

##### URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}

**Table 8-31** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Engine.                                                               |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Indicates the instance ID.                                            |

##### Request Parameters

None

##### Response Parameters

Status code: 200

**Table 8-32** Response body parameter

| Parameter            | Type             | Description                                                                                                                                                                         |
|----------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name                 | String           | Indicates the instance name.                                                                                                                                                        |
| engine               | String           | Engine.                                                                                                                                                                             |
| status               | String           | Status.                                                                                                                                                                             |
| description          | String           | Message description.                                                                                                                                                                |
| type                 | String           | Indicates the instance type. Value: <b>cluster</b> .                                                                                                                                |
| specification        | String           | Indicates the instance specification.                                                                                                                                               |
| engine_version       | String           | Version.                                                                                                                                                                            |
| instance_id          | String           | Indicates the instance ID.                                                                                                                                                          |
| charging_mode        | Integer          | Indicates the billing mode. <b>1</b> : pay-per-use mode; <b>0</b> : yearly/monthly billing.                                                                                         |
| vpc_id               | String           | VPC ID.                                                                                                                                                                             |
| vpc_name             | String           | VPC name.                                                                                                                                                                           |
| created_at           | String           | Indicates the time when an instance is created.<br><br>The time is in the format of timestamp, that is, the offset milliseconds from 1970-01-01 00:00:00 UTC to the specified time. |
| product_id           | String           | Indicates the product ID.                                                                                                                                                           |
| security_group_id    | String           | Indicates the security group ID.                                                                                                                                                    |
| security_group_name  | String           | Indicates the security group name.                                                                                                                                                  |
| subnet_id            | String           | Indicates the subnet ID.                                                                                                                                                            |
| subnet_name          | String           | Indicates the subnet name.                                                                                                                                                          |
| subnet_cidr          | String           | Subnet route. This field is displayed only for RocketMQ 5.x.                                                                                                                        |
| available_zones      | Array of strings | AZ ID list.                                                                                                                                                                         |
| available_zone_names | Array of strings | AZ name list.                                                                                                                                                                       |
| user_id              | String           | User ID.                                                                                                                                                                            |
| user_name            | String           | Indicates the username.                                                                                                                                                             |
| maintain_begin       | String           | Time at which the maintenance time window starts. Format: <i>HH:mm:ss</i> .                                                                                                         |

| Parameter               | Type    | Description                                                                                                                                                                                                             |
|-------------------------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| maintain_end            | String  | Time at which the maintenance time window ends. Format: <i>HH:mm:ss</i> .                                                                                                                                               |
| enable_log_collection   | Boolean | Indicates whether log collection is enabled.                                                                                                                                                                            |
| storage_space           | Integer | Storage space, in GB.                                                                                                                                                                                                   |
| used_storage_space      | Integer | Used message storage space. Unit: GB.                                                                                                                                                                                   |
| enable_publicip         | Boolean | Whether to enable public access.                                                                                                                                                                                        |
| publicip_id             | String  | ID of the elastic IP address (EIP) bound to an instance. Use commas (,) to separate multiple EIP IDs. This parameter is mandatory if public access is enabled (that is, <b>enable_publicip</b> is set to <b>true</b> ). |
| publicip_address        | String  | Public IP address.                                                                                                                                                                                                      |
| ssl_enable              | Boolean | Whether SSL is enabled.                                                                                                                                                                                                 |
| cross_vpc_info          | String  | Indicates cross-VPC access information.                                                                                                                                                                                 |
| storage_resource_id     | String  | Indicates the storage resource ID.                                                                                                                                                                                      |
| storage_spec_code       | String  | Storage specification code.                                                                                                                                                                                             |
| service_type            | String  | Indicates the service type.                                                                                                                                                                                             |
| storage_type            | String  | Indicates the storage type.                                                                                                                                                                                             |
| extend_times            | Long    | Extension time.                                                                                                                                                                                                         |
| ipv6_enable             | Boolean | Whether IPv6 is enabled.                                                                                                                                                                                                |
| support_features        | String  | Features supported by the instance.                                                                                                                                                                                     |
| disk_encrypted          | Boolean | Indicates whether disk encryption is enabled.                                                                                                                                                                           |
| ces_version             | String  | Indicates the Cloud Eye version.                                                                                                                                                                                        |
| node_num                | Integer | Number of nodes.                                                                                                                                                                                                        |
| new_spec_billing_enable | Boolean | Whether billing based on new specifications is enabled.                                                                                                                                                                 |
| enable_acl              | Boolean | Whether access control is enabled.                                                                                                                                                                                      |
| broker_num              | Integer | Number of nodes (displayed only for RocketMQ 4.8.0).                                                                                                                                                                    |

| Parameter                  | Type                                       | Description                                                                                                                                                |
|----------------------------|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dns_enable                 | Boolean                                    | Whether to enable domain name access to an instance. <ul style="list-style-type: none"><li>• <b>true</b>: enable</li><li>• <b>false</b>: disable</li></ul> |
| namesrv_address            | String                                     | Metadata address.                                                                                                                                          |
| namesrv_domain_name        | String                                     | Metadata domain name.                                                                                                                                      |
| broker_address             | String                                     | Service data address.                                                                                                                                      |
| public_namesrv_address     | String                                     | Public network metadata address.                                                                                                                           |
| public_namesrv_domain_name | String                                     | Public metadata domain name.                                                                                                                               |
| public_broker_address      | String                                     | Public network service data address.                                                                                                                       |
| grpc_address               | String                                     | gRPC connection address (displayed only for RocketMQ 5.x).                                                                                                 |
| grpc_domain_name           | String                                     | gRPC connection domain name (displayed only for RocketMQ 5.x).                                                                                             |
| public_grpc_address        | String                                     | Public gRPC connection address (displayed only for RocketMQ 5.x).                                                                                          |
| public_grpc_domain_name    | String                                     | Public gRPC domain name (displayed only for RocketMQ 5.x).                                                                                                 |
| enterprise_project_id      | String                                     | Indicates the enterprise project ID.                                                                                                                       |
| tags                       | Array of <a href="#">TagEntity</a> objects | Indicates the list of tags.                                                                                                                                |
| total_storage_space        | Integer                                    | Total storage space.                                                                                                                                       |
| resource_spec_code         | String                                     | Resource specification.                                                                                                                                    |



**Table 8-33** TagEntity

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                         |
|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | Tag key, which: <ul style="list-style-type: none"><li>• Cannot be blank.</li><li>• Must be unique for the same instance.</li><li>• Can contain 1 to 128 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>._:=-@</code></li><li>• Cannot start or end with a space.</li></ul> |
| value     | String | Tag value, which: <ul style="list-style-type: none"><li>• Can contain 0 to 255 characters.</li><li>• Can contain letters, digits, spaces, and special characters <code>._:=-@</code></li><li>• Cannot start or end with a space.</li></ul>                                                                          |

## Example Requests

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}
```

## Example Response

Status code: 200

Metrics queried successfully.

```
{
  "name" : "reliability-test",
  "engine" : "reliability",
  "status" : "RUNNING",
  "description" : "",
  "type" : "single.basic",
  "specification" : "rocketmq.b1.large.1, 500 tps",
  "engine_version" : "5.x",
  "instance_id" : "68fdc9a8-805e-439d-8dd9-25adc1c58bf6",
  "resource_spec_code" : "",
  "charging_mode" : 1,
  "vpc_id" : "3db8490c-4d6d-4d8f-8d3f-047b0de4c5cf",
  "vpc_name" : "vpc-1101840",
  "created_at" : "1636699753874",
  "product_id" : "rocketmq.b1.large.1",
  "security_group_id" : "23c5977f-ff33-4b95-a73e-08d8a0bc4e6c",
  "security_group_name" : "security_group_test",
  "subnet_id" : "0a0f1fcb-f019-458d-b9e5-301867394d50",
  "subnet_name" : "subnet-test",
  "subnet_cidr" : "192.168.64.0/18",
  "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
  "available_zone_names" : [ "AZ3" ],
  "user_id" : "0b01fbb53600d4671fa8c00673c71260",
  "user_name" : "user_test",
  "maintain_begin" : "02:00:00",
  "maintain_end" : "06:00:00",
  "enable_log_collection" : false,
  "storage_space" : 558,
  "total_storage_space" : 600,
```

```
"used_storage_space" : 28,
"enable_publicip" : true,
"publicip_id" : "83924171-7014-48f0-a6b2-c714e7a090dd",
"publicip_address" : "****",
"ssl_enable" : false,
"cross_vpc_info" : "{\"192.168.93.114\":{\"advertised_ip\":\"192.168.93.114\",\"broker_port\":\"10100\",\"port_id\":\"b3de3981-1f73-4e6f-b35a-78833b783364\",\"namesrv_port\":\"8300\"}}",
"storage_resource_id" : "164bdaef-2e67-4fd5-be8b-a18f91d455a2",
"storage_spec_code" : "dms.physical.storage.ultra.v2",
"service_type" : "advanced",
"storage_type" : "hec",
"enterprise_project_id" : "0",
"extend_times" : 0,
"ipv6_enable" : false,
"support_features" :
"kafka.crossvpc.domain.enable,auto.create.topics.enable,rabbitmq.plugin.management,support.permissive.mode,auto.topic.switch,feature.physerver.kafka.user.manager,kafka.ssl.2way.modify.enable,kafka.new.pod.port,message_trace_enable,features.pod.token.access,log.enable,features.log.collection,max.connections,rabbitmq.manage.support,replica_port_standalone,feature.physerver.kafka.topic.accesspolicy,enable.kafka.quota.monitor,rocketmq.acl,roma_app_enable,support.kafka.producer.ip.enable,new.authinfo,enable.kafka.quota,rabbitmq_run_log_enable,max.ssl.connections,route,message_trace_v2_enable,kafka.config.dynamic.modify.enable,feature.physerver.kafka.topic.modify,enable.topic.quota,kafka.ssl.cert.modify.enable,roma.user.manage.no.support,auto.create.groups.enable,feature.physerver.kafka.pulbic.dynamic,kafka.config.static.modify.enable",
"disk_encrypted" : false,
"ces_version" : "linux,v1,v2,v3,v4",
"new_spec_billing_enable" : true,
"enable_acl" : false,
"namesrv_address" : "192.168.93.114:8100",
"broker_address" : "192.168.64.0/18:10100",
"public_namesrv_address" : "100.85.116.211:8200",
"public_broker_address" : "100.85.116.211:10101",
"grpc_address" : "192.168.93.114:8080",
"public_grpc_address" : "100.85.116.211:8081"
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

## 8.2.2 Managing Consumer Groups

### 8.2.2.1 Querying All Consumer Groups

#### Function

This API is used to query all consumer groups.

#### Call Method

For details, see [How to Call an API](#).

## URI

GET /v2/{engine}/{project\_id}/instances/{instance\_id}/groups

**Table 8-34** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Indicates the message engine.                                         |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                          |

**Table 8-35** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                 |
|-----------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | Offset, which is the position where the query starts. The value must be greater than or equal to 0.                         |
| limit     | No        | Integer | Maximum number of consumer group IDs returned in the current query. The default value is 10. The value ranges from 1 to 50. |
| group     | No        | String  | Filtering consumer group names that contain specific keywords.                                                              |
| topic     | No        | String  | If a topic is specified, only the consumer groups of the topic are queried.                                                 |

## Request

None.

## Response

Status code: 200

**Table 8-36** Response body parameters

| Parameter | Type   | Description                      |
|-----------|--------|----------------------------------|
| total     | Number | Total number of consumer groups. |

| Parameter       | Type                                           | Description                                            |
|-----------------|------------------------------------------------|--------------------------------------------------------|
| groups          | Array of <a href="#">ConsumerGroup</a> objects | Consumer group list.                                   |
| max             | Integer                                        | Maximum number of consumer groups that can be created. |
| remaining       | Integer                                        | Number of consumer groups that can still be created.   |
| next_offset     | Integer                                        | Offset of the next page.                               |
| previous_offset | Integer                                        | Offset of the previous page.                           |

**Table 8-37** ConsumerGroup

| Parameter       | Type             | Description                                                                                                                                |
|-----------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| enabled         | Boolean          | Whether consumption is allowed.                                                                                                            |
| broadcast       | Boolean          | Whether to broadcast.                                                                                                                      |
| brokers         | Array of strings | List of associated brokers.                                                                                                                |
| name            | String           | Consumer group name. Enter 3 to 64 characters. Use only letters, digits, percent (%), vertical bars ( ), hyphens (-), and underscores (_). |
| group_desc      | String           | Consumer group description. 0 to 200 characters.                                                                                           |
| retry_max_time  | Integer          | Maximum number of retries. The value ranges from 1 to 16.                                                                                  |
| createdAt       | Long             | Creation timestamp.                                                                                                                        |
| permissions     | Array of strings | Permission set.                                                                                                                            |
| consume_orderly | Boolean          | Whether orderly consumption is enabled.                                                                                                    |

## Example Request

```
GET https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/groups
```

## Example Response

Status code: 200

Metrics queried successfully.

```
{  
  "total" : 1,
```

```
"groups" : [ {  
  "name" : "group-1",  
  "enabled" : true,  
  "broadcast" : false,  
  "brokers" : [ "broker-0" ],  
  "createdAt" : 1709087952686,  
  "permissions" : [ ],  
  "retry_max_time" : 16,  
  "consume_orderly" : false  
} ],  
"max" : 4000,  
"remaining" : 3999,  
"next_offset" : -1,  
"previous_offset" : -1  
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.2.2.2 Updating Consumer Groups

## Function

This API is used to update consumer groups.

## Call Method

For details, see [How to Call an API](#).

## URI

PUT */v2/{engine}/{project\_id}/instances/{instance\_id}/groups*

**Table 8-38** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Engine.                                                               |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Indicates the instance ID.                                            |

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 8-39** Response body parameter

| Parameter | Type   | Description         |
|-----------|--------|---------------------|
| job_id    | String | Background task ID. |

## Example Requests

```
PUT https://{endpoint}/v2/{engine}/{project_id}/instances/{instance_id}/groups
```

## Example Response

Status code: 200

Operation succeeded.

```
{
  "job_id" : "8a2c259182ab0e9d0182ab1882560010"
}
```

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.2.2.3 Modifying a Specified Consumer Group

#### Function

This API is used to modify a specified consumer group.

#### Call Method

For details, see [How to Call an API](#).

#### URI

```
PUT /v2/{engine}/{project_id}/instances/{instance_id}/groups/{group}
```

**Table 8-40** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Engine.                                                               |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Indicates the instance ID.                                            |
| group       | Yes       | String | Consumer group ID.                                                    |

## Request Parameters

None

## Response Parameters

None

## Example Requests

PUT https://{endpoint}/v2/{engine}/{project\_id}/instances/{instance\_id}/groups/{group}

## Example Response

None

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).

### 8.2.2.4 Deleting a Consumer Group

## Function

This API is used to delete a consumer group.

## Call Method

For details, see [How to Call an API](#).

## URI

DELETE /v2/{engine}/{project\_id}/instances/{instance\_id}/groups/{group}

**Table 8-41** URI parameters

| Parameter   | Mandatory | Type   | Description                                                           |
|-------------|-----------|--------|-----------------------------------------------------------------------|
| engine      | Yes       | String | Engine.                                                               |
| project_id  | Yes       | String | Project ID. For details, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Indicates the instance ID.                                            |
| group       | Yes       | String | Consumer group ID.                                                    |

## Request Parameters

None

## Response Parameters

None

## Example Requests

DELETE https://{endpoint}/v2/{engine}/{project\_id}/instances/{instance\_id}/groups/{group}

## Example Response

None

## Status Code

| Status Code | Description |
|-------------|-------------|
| 200         | Successful  |

## Error Code

See [Error Codes](#).



# 9 Appendix

## 9.1 Status Code

Table 9-1 lists status codes.

Table 9-1 Status codes

| Status Code | Name                          | Description                                                                                                                                                                                                                                          |
|-------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100         | Continue                      | The server has received the initial part of the request and the client should continue to send the remaining part.                                                                                                                                   |
| 101         | Switching Protocols           | 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.<br><br>For example, the current HTTP protocol is switched to a later version of HTTP. |
| 200         | OK                            | Request sent successfully.                                                                                                                                                                                                                           |
| 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 request has been fulfilled.                                                                                                                                                                                                                      |
| 204         | NoContent                     | The server has successfully processed the request, but is not returning any response body. The status code is returned in response to an HTTP OPTIONS request.                                                                                       |

| Status Code | Name              | Description                                                                                                                                                                                                 |
|-------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 205         | Reset Content     | The server has fulfilled the request, but the requester is required to reset the content.                                                                                                                   |
| 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 have been permanently moved to the given URI indicated in this response.                                                                                                       |
| 302         | Found             | The requested resource was temporarily moved.                                                                                                                                                               |
| 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. When the server returns this status code, it does not return any resources.                                                                                   |
| 305         | Use Proxy         | The requested resource is available only through a proxy.                                                                                                                                                   |
| 306         | Unused            | This HTTP status code is no longer used.                                                                                                                                                                    |
| 400         | BadRequest        | Invalid request.<br>The client should modify the request instead of re-initiating it.                                                                                                                       |
| 401         | Unauthorized      | The authorization 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 cannot be found.<br>The client should modify the request instead of re-initiating it.                                                                                                |

| Status Code | Name                            | Description                                                                                                                                                                                                                                                           |
|-------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 405         | MethodNotAllowed                | 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 cannot fulfill the request based on 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 when waiting for the request.<br>The client may re-initiate the request without any modification at any time.                                                                                                                                    |
| 409         | Conflict                        | The request cannot be processed due to a conflict, such as 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.                                                                                                                                                                                  |
| 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 server refuses to process a request because the request is too large. The server may close the connection to prevent the client from continuing the request. If the server cannot process the request temporarily, the response will contain a Retry-After 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.                                                                                                                                                                                         |

| Status Code | Name                       | Description                                                                                                                                                                                                                                                                                                                         |
|-------------|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 422         | UnprocessableEntity        | The request is well-formed but is unable to be processed due to semantic errors.                                                                                                                                                                                                                                                    |
| 429         | TooManyRequests            | 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, the client should re-initiate requests after the time specified in the Retry-After header of the response expires. |
| 500         | InternalServerError        | 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         | ServiceUnavailable         | The requested service is invalid.<br>The client should modify the request instead of re-initiating it.                                                                                                                                                                                                                              |
| 504         | ServerTimeout              | The request cannot be fulfilled within a given time. The response will reach the client only if the request carries the <b>timeout</b> parameter.                                                                                                                                                                                   |
| 505         | HTTP Version not supported | The server does not support the HTTP protocol version used in the request.                                                                                                                                                                                                                                                          |

## 9.2 Error Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

| Status Code | Error Codes  | Error Message                     | Description                | Solution                     |
|-------------|--------------|-----------------------------------|----------------------------|------------------------------|
| 400         | DMS.00400002 | The project ID format is invalid. | Invalid project ID.        | Check the project ID format. |
| 400         | DMS.00400004 | The request body is empty.        | The request body is empty. | Check the request body.      |

| Status Code | Error Codes  | Error Message                                                                                                                        | Description                                                                                                                          | Solution                        |
|-------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 400         | DMS.00400005 | The message body is not in JSON format or contains invalid characters.                                                               | Check the project ID format.                                                                                                         | Check the message body format.  |
| 400         | DMS.00400007 | Unsupported type.                                                                                                                    | Unsupported type.                                                                                                                    | Check the type.                 |
| 400         | DMS.00400008 | Unsupported version.                                                                                                                 | Unsupported version.                                                                                                                 | Check the version.              |
| 400         | DMS.00400009 | Invalid product_id.                                                                                                                  | Invalid product_id in the request.                                                                                                   | Check the product_id parameter. |
| 400         | DMS.00400010 | Invalid instance name. The name must be 4 to 64 characters long. Only letters, digits, underscores (_), and hyphens (-) are allowed. | Invalid instance name. The name must be 4 to 64 characters long. Only letters, digits, underscores (_), and hyphens (-) are allowed. | Check the instance name.        |
| 400         | DMS.00400011 | The instance description can contain a maximum of 1024 characters.                                                                   | The instance description can contain a maximum of 1024 characters.                                                                   | Check the instance description. |

| Status Code | Error Codes      | Error Message                                                                                                      | Description                                                                                                        | Solution                                                                                                                                                                                                                                                                                                                                        |
|-------------|------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 400         | DMS.0040001<br>2 | Invalid password format.                                                                                           | The password does not meet the complexity requirements.                                                            | Check whether the password meets the requirements.<br>A password: <ul style="list-style-type: none"> <li>• Can contain 8 to 32 characters.</li> <li>• Must contain at least three of the following character types: letters, digits, and special characters `~!@#\$%^&amp;*()-_+= []{}:~",./?`</li> <li>• Cannot be a weak password.</li> </ul> |
| 400         | DMS.0040001<br>3 | vpc_id in the request is empty.                                                                                    | Request parameter vpc_id is empty.                                                                                 | Check the vpc_id parameter.                                                                                                                                                                                                                                                                                                                     |
| 400         | DMS.0040001<br>4 | security_group_id in the request is empty.                                                                         | Request parameter security_group_id is empty.                                                                      | Check the security_group_id parameter.                                                                                                                                                                                                                                                                                                          |
| 400         | DMS.0040001<br>5 | Invalid username. A username must be 4 to 64 characters long and consist of only letters, digits, and hyphens (-). | Invalid username. A username must be 4 to 64 characters long and consist of only letters, digits, and hyphens (-). | Check the username.                                                                                                                                                                                                                                                                                                                             |
| 400         | DMS.0040001<br>6 | subnet_id in the request is empty.                                                                                 | Request parameter subnet_id is empty.                                                                              | Check the subnet_id parameter.                                                                                                                                                                                                                                                                                                                  |

| Status Code | Error Codes  | Error Message                                                   | Description                                                              | Solution                                           |
|-------------|--------------|-----------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------|
| 400         | DMS.00400017 | This DMS instance job task is still running.                    | A background task associated with this instance is running.              | Try again later.                                   |
| 400         | DMS.00400018 | This subnet must exist in the VPC.                              | The subnet must exist in the VPC.                                        | Check the subnet.                                  |
| 400         | DMS.00400019 | The password does not meet the complexity requirements.         | The password does not meet the complexity requirements.                  | Check whether the password meets the requirements. |
| 400         | DMS.00400020 | DHCP must be enabled for this subnet.                           | DHCP must be enabled for the subnet.                                     | Check the DHCP status.                             |
| 400         | DMS.00400021 | The isAutoRenew parameter in the request must be either 0 or 1. | Invalid isAutoRenew in the request.                                      | Check the isAutoRenew parameter.                   |
| 400         | DMS.00400022 | Engine does not match the product id.                           | The engine and product ID parameters do not match.                       | Check the engine parameter.                        |
| 400         | DMS.00400026 | This operation is not allowed due to the instance status.       | This operation is not allowed when the instance is in the current state. | Check the instance status.                         |
| 400         | DMS.00400028 | Query advanced product, specCode not exists.                    | The specCode does not exist during the advanced feature query.           | Check the origin_spec_code parameter.              |

| Status Code | Error Codes  | Error Message                                                                                     | Description                                                                            | Solution                              |
|-------------|--------------|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|---------------------------------------|
| 400         | DMS.00400029 | Query advanced product failed, can not find product for request.                                  | The specCode does not exist during the advanced feature query.                         | Check the origin_spec_code parameter. |
| 400         | DMS.00400030 | Invalid DMS instance id. The id must be a uuid.                                                   | Invalid instance ID.                                                                   | Check the id parameter.               |
| 400         | DMS.00400035 | DMS instance quota of the tenant is insufficient.                                                 | Insufficient instance quota.                                                           | Apply for a higher quota.             |
| 400         | DMS.00400037 | The instanceParams parameter in the request contains invalid characters or is not in JSON format. | Request parameter instanceParams is not in JSON format or contains invalid characters. | Check the request parameter.          |
| 400         | DMS.00400038 | The periodNum parameter in the request must be an integer.                                        | The periodNum parameter in the request must be an integer.                             | Check the periodNum parameter.        |
| 400         | DMS.00400039 | The quota limit has been reached.                                                                 | The quota limit has been reached.                                                      | Apply for a higher quota.             |
| 400         | DMS.00400042 | The AZ does not exist.                                                                            | The AZ does not exist.                                                                 | Check the AZ.                         |
| 400         | DMS.00400045 | The instance is not frozen and cannot be unfrozen.                                                | The instance cannot be unfrozen because it is not frozen.                              | Check the instance status.            |
| 400         | DMS.00400046 | This security group does not exist.                                                               | The security group does not exist.                                                     | Check the security group.             |



| Status Code | Error Codes  | Error Message                                                                                                                            | Description                                                                             | Solution                        |
|-------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------|
| 400         | DMS.00400047 | The periodType parameter in the request must be either 2 or 3.                                                                           | Invalid periodType in the request.                                                      | Check the periodType parameter. |
| 400         | DMS.00400048 | Invalid security group rules. Ensure that rules with the protocol being ANY are configured for both the inbound and outbound directions. | The security group must have both outbound and inbound rules with protocols set to ANY. | Check the security group rules. |
| 400         | DMS.00400049 | The availability zone does not support ipv6.                                                                                             | The AZ does not support IPv6.                                                           | Select another AZ.              |
| 400         | DMS.00400051 | not found the new setup version tar to upgrade instance.                                                                                 | The package for upgrading the instance to the target version is not found.              | Select another target version.  |
| 400         | DMS.00400052 | only the instance at running status can upgrade.                                                                                         | Only running instances can be upgraded.                                                 | Try again later.                |
| 400         | DMS.00400053 | the upgrade instance version equals to current version.                                                                                  | The target version is the same as the current version.                                  | Select another target version.  |
| 400         | DMS.00400055 | Resource sold out.                                                                                                                       | Resources, such as ECS and volume resources, are insufficient.                          | Try again later.                |

| Status Code | Error Codes  | Error Message                                                                               | Description                                                                      | Solution                             |
|-------------|--------------|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------|
| 400         | DMS.00400060 | This instance name already exists.                                                          | The instance name already exists.                                                | Check the instance name.             |
| 400         | DMS.00400061 | Invalid instance ID format.                                                                 | Invalid instance ID.                                                             | Check the instance ID.               |
| 400         | DMS.00400062 | Invalid request parameter.                                                                  | Invalid request parameters.                                                      | Check the request parameters.        |
| 400         | DMS.00400063 | Invalid configuration parameter {0}.                                                        | Invalid configuration parameter {0}.                                             | Check the parameter.                 |
| 400         | DMS.00400064 | The action parameter in the request must be delete or restart.                              | The action parameter in the request must be delete or restart.                   | Check the action parameter.          |
| 400         | DMS.00400065 | The instances parameter in the request is empty.                                            | The instances parameter in the request is empty.                                 | Check the instances parameter.       |
| 400         | DMS.00400066 | Invalid configuration parameter {0}.                                                        | Invalid configuration parameter {0}.                                             | Check the parameter.                 |
| 400         | DMS.00400067 | The available_zones parameter in the request must be an array that contains only one AZ ID. | Request parameter available_zones must be an array that contains only one AZ ID. | Check the available_zones parameter. |
| 400         | DMS.00400068 | The VPC does not exist.                                                                     | The VPC does not exist.                                                          | Check the VPC.                       |
| 400         | DMS.00400070 | Invalid task ID format.                                                                     | Invalid task ID.                                                                 | Check the task ID.                   |

| Status Code | Error Codes  | Error Message                                                                                       | Description                                                                               | Solution                                            |
|-------------|--------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-----------------------------------------------------|
| 400         | DMS.00400077 | Insufficient IPs in the selected subnet.                                                            | Too few IP addresses in the selected subnet.                                              | Select another subnet with sufficient IP addresses. |
| 400         | DMS.00400081 | Duplicate instance name.                                                                            | The instance name already exists.                                                         | Check the instance name.                            |
| 400         | DMS.00400082 | Instance id is repeated.                                                                            | The instance ID already exists.                                                           | Check the instance ID.                              |
| 400         | DMS.00400085 | The message body contains invalid characters or is not in JSON format. The error key is <key>.      | The message body is not in JSON format or contains invalid characters.                    | Check the message body.                             |
| 400         | DMS.00400099 | The following instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted. | Instances ({} in the Creating, Starting, Stopping, or Restarting state cannot be deleted. | Check the instance status.                          |
| 400         | DMS.00400100 | The instances array can contain a maximum of 50 instance IDs.                                       | The instances array can contain a maximum of 50 instance IDs.                             | Check the instance quantity.                        |

| Status Code | Error Codes      | Error Message                                                                                                                                          | Description                                                                                                                                                          | Solution                                     |
|-------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|
| 400         | DMS.0040010<br>1 | The name of a Kafka topic must be 4 to 64 characters long and start with a letter. Only letters, digits, underscores (_), and hyphens (-) are allowed. | The name of a topic in a Kafka instance must be 4 to 64 characters long and start with a letter. Only letters, digits, underscores (_), and hyphens (-) are allowed. | Check the topic name.                        |
| 400         | DMS.0040010<br>2 | The number of partitions created for a Kafka topic must be within the range of 1-200.                                                                  | The number of partitions created for a topic in a Kafka instance must be within the range of 1-200.                                                                  | Check the number of partitions of the topic. |
| 400         | DMS.0040010<br>3 | The number of replicas created for a Kafka topic must be within the range of 1-20.                                                                     | The number of replicas created for a topic in a Kafka instance must be within the range of 1-20.                                                                     | Check the number of replicas of the topic.   |
| 400         | DMS.0040010<br>5 | The message retention period of a Kafka topic must be within the range of 1-168.                                                                       | The aging time of a topic in a Kafka instance must be within the range of 1-168.                                                                                     | Check the aging time of the topic.           |
| 400         | DMS.0040010<br>6 | Invalid maintenance time window.                                                                                                                       | Invalid maintenance time window.                                                                                                                                     | Check the maintenance time window parameter. |

| Status Code | Error Codes  | Error Message                                                                            | Description                                                             | Solution                                          |
|-------------|--------------|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------|
| 400         | DMS.00400107 | The instance exists for unpaid scale up orders. Please process non payment orders first. | A specification modification order for the instance is pending.         | Process the order first.                          |
| 400         | DMS.00400108 | The Instance exists for processing scale up order. Please try again later.               | A specification modification order for the instance is being processed. | Try again later.                                  |
| 400         | DMS.00400124 | The maximum number of disk expansion times has been reached.                             | The maximum number of disk expansion times has been reached.            | Check the maximum number of disk expansion times. |
| 400         | DMS.00400125 | Invalid SPEC_CODE.                                                                       | Invalid SPEC_CODE.                                                      | Check SPEC_CODE.                                  |
| 400         | DMS.00400126 | Invalid period time.                                                                     | Invalid time period for yearly/monthly billing.                         | Check the time period for yearly/monthly billing. |
| 400         | DMS.00400127 | Instance not support to change retention_policy.                                         | The instance does not support retention policy changes.                 | Contact technical support.                        |
| 400         | DMS.00400128 | Invalid public access parameters.                                                        | Invalid public access parameters.                                       | Check the public access parameters.               |
| 400         | DMS.00400129 | Current instance version is less than required.                                          | The instance version does not support this operation.                   | Contact technical support.                        |

| Status Code | Error Codes  | Error Message                                           | Description                                                                                        | Solution                        |
|-------------|--------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------|
| 400         | DMS.00400133 | Sink task quota for connector invalid.                  | Invalid connector task quota.                                                                      | Contact technical support.      |
| 400         | DMS.00400134 | There is another order need to pay first.               | An unpaid order exists.                                                                            | Pay for the order first.        |
| 400         | DMS.00400135 | Not support disk encrypted.                             | Disk encryption is not supported.                                                                  | Do not enable disk encryption.  |
| 400         | DMS.00400136 | Disk encrypted key is null.                             | The disk encryption key is empty.                                                                  | Check the disk encryption key.  |
| 400         | DMS.00400137 | Disk encrypted key state is not enabled.                | The disk encryption key is not enabled.                                                            | Enable the disk encryption key. |
| 400         | DMS.00400142 | Timestamp is invalid.                                   | Timestamp is invalid.                                                                              | Enter a correct timestamp.      |
| 400         | DMS.00400500 | Invalid disk space.                                     | Invalid disk space.                                                                                | Check the disk space.           |
| 400         | DMS.00400800 | Invalid request parameter. Check the request parameter. | Invalid request parameter.                                                                         | Check the request parameters.   |
| 400         | DMS.00400861 | Replication factor larger than available brokers.       | The number of replicas in the topic to be created is greater than the number of available brokers. | Contact technical support.      |
| 400         | DMS.00400867 | Failed to create the Smart Connect task.                | Failed to create the Smart Connect task.                                                           | Contact technical support.      |

| Status Code | Error Codes  | Error Message                                                                              | Description                                                                                | Solution                                                                       |
|-------------|--------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| 400         | DMS.00400868 | Failed to stop the Smart Connect task.                                                     | Failed to stop the Smart Connect task.                                                     | Try again later.                                                               |
| 400         | DMS.00400869 | Failed to start the Smart Connect task.                                                    | Failed to start the Smart Connect task.                                                    | Try again later.                                                               |
| 400         | DMS.00400870 | Failed to verify the Smart Connect task.                                                   | Failed to verify the Smart Connect task.                                                   | Try again later.                                                               |
| 400         | DMS.00400872 | Failed to restart the Smart Connect task.                                                  | Failed to restart the Smart Connect task.                                                  | Try again later.                                                               |
| 400         | DMS.00400873 | Failed to modify the Smart Connect task.                                                   | Failed to modify the Smart Connect task.                                                   | Contact technical support.                                                     |
| 400         | DMS.00400874 | The topic has been used in another Smart Connect task.                                     | The topic has been used in another Smart Connect task.                                     | Check the topic and try again.                                                 |
| 400         | DMS.00400876 | The topic does not exist.                                                                  | The topic does not exist.                                                                  | Check the topic and try again.                                                 |
| 400         | DMS.00400882 | The topic offset cannot be deleted: The topic is subscribed by the current consumer group. | The topic offset cannot be deleted: The topic is subscribed by the current consumer group. | Cancel the subscription relationship between the topic and the consumer group. |
| 400         | DMS.00400970 | RabbitMQ plugin is not exist                                                               | Invalid plugin name                                                                        | Check the plugin list.                                                         |
| 400         | DMS.00400971 | The instance ssl is off.                                                                   | The instance ssl is off.                                                                   | View the instance details and check whether SSL is enabled.                    |

| Status Code | Error Codes  | Error Message                                         | Description                                            | Solution                                 |
|-------------|--------------|-------------------------------------------------------|--------------------------------------------------------|------------------------------------------|
| 400         | DMS.00400975 | Failed to query topics.                               | Failed to query topics.                                | Check whether the topic exists.          |
| 400         | DMS.00404033 | Does not support extend rabbitMQ disk space.          | The RabbitMQ disk space cannot be expanded.            | Scale out the RabbitMQ cluster.          |
| 400         | DMS.00500033 | Failed to access EPS to update the project            | Failed to access EPS to update the project             | Contact technical support.               |
| 400         | DMS.00500960 | Invalid user AK/SK.                                   | Invalid user AK/SK.                                    | Correct the user AK/SK and try again.    |
| 400         | DMS.00500978 | Consumer group name exits.                            | Consumer group name exits.                             | Please check the consumer group name.    |
| 400         | DMS.00500980 | Partition reassigning.                                | Partition reassigning.                                 | Please check partition reassignment.     |
| 400         | DMS.00500982 | Insufficient broker disk.                             | Insufficient broker disk.                              | Check target broker disk capacity.       |
| 400         | DMS.00500986 | Your account has been restricted.                     | Your account is suspended.                             | Contact the billing center.              |
| 400         | DMS.00500987 | Balance is not enough                                 | Insufficient balance.                                  | Top up your account and try again later. |
| 400         | DMS.10240002 | The number of queried queues exceeds the upper limit. | The maximum number of queried queues has been reached. | Check the queue quantity.                |
| 400         | DMS.10240004 | The tag name is invalid.                              | Invalid tag name.                                      | Check the tag name.                      |
| 400         | DMS.10240005 | The project ID format is invalid.                     | Invalid project ID.                                    | Check the project ID format.             |



| Status Code | Error Codes  | Error Message                                                          | Description                                                            | Solution                                 |
|-------------|--------------|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------|
| 400         | DMS.10240007 | The name contains invalid characters.                                  | The name contains invalid characters.                                  | Check the name.                          |
| 400         | DMS.10240009 | The message body is not in JSON format or contains invalid characters. | The message body is not in JSON format or contains invalid characters. | Check the message body.                  |
| 400         | DMS.10240010 | The description contains invalid characters.                           | The description contains invalid characters.                           | Check the description.                   |
| 400         | DMS.10240011 | The name length must be 1 to 64 characters.                            | The name can contain 1 to 64 characters.                               | Check the name length.                   |
| 400         | DMS.10240012 | The name length must be 1 to 32 characters.                            | The name can contain 1 to 32 characters.                               | Check the name length.                   |
| 400         | DMS.10240013 | The description length must not exceed 160 characters.                 | The description can contain a maximum of 160 characters.               | Check the description length.            |
| 400         | DMS.10240014 | The number of consumable messages exceeds the maximum limit.           | The number of consumable messages is not within the allowed range.     | Check the number of consumable messages. |
| 400         | DMS.10240015 | The queue ID format is invalid.                                        | Invalid queue ID.                                                      | Check the queue ID.                      |
| 400         | DMS.10240016 | The group ID format is invalid.                                        | Invalid group ID.                                                      | Check the group ID.                      |

| Status Code | Error Codes  | Error Message                                                         | Description                                                           | Solution                                                                      |
|-------------|--------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 400         | DMS.10240017 | The queue already exists.                                             | The queue already exists.                                             | Check whether the queue exists.                                               |
| 400         | DMS.10240018 | The consumer group already exists.                                    | The consumer group already exists.                                    | Check whether the consumer group exists.                                      |
| 400         | DMS.10240019 | The number of consumer groups exceeds the upper limit.                | The number of consumer groups exceeds the upper limit.                | Check the number of consumer groups.                                          |
| 400         | DMS.10240020 | The quota is insufficient.                                            | Insufficient quota.                                                   | Check the quota.                                                              |
| 400         | DMS.10240021 | The value of time_wait is not within the value range of 1-60.         | The value of time_wait is not within the range of 1-60.               | Check the value of time_wait.                                                 |
| 400         | DMS.10240022 | The value of max Consume Count must be within the range of 1-100.     | The value of max Consume Count must be within the range of 1-100.     | Check the value of max Consume Count.                                         |
| 400         | DMS.10240027 | The value of retention_hours must be an integer in the range of 1-72. | The value of retention_hours must be an integer in the range of 1-72. | Check the value of retention_hours.                                           |
| 400         | DMS.10240028 | Non-kafka queues do not support retention_hours.                      | Non-kafka queues do not support retention_hours.                      | Check whether the queue is a Kafka queue. If not, do not set retention_hours. |
| 400         | DMS.10240032 | The queue is being created.                                           | The queue is being created.                                           | Check whether the queue is being created.                                     |
| 400         | DMS.10240035 | The tag key is empty or too long.                                     | The tag key of the queue is empty or too long.                        | Check the tag key of the queue.                                               |

| Status Code | Error Codes  | Error Message                                                                    | Description                                                                      | Solution                                            |
|-------------|--------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------|
| 400         | DMS.10240036 | The tag key contains invalid characters.                                         | The tag key of the queue contains invalid characters.                            | Check the tag key of the queue.                     |
| 400         | DMS.10240038 | The tag value is too long.                                                       | The tag value is too long.                                                       | Check the tag value of the queue.                   |
| 400         | DMS.10240039 | The tag value contains invalid characters.                                       | The tag value contains invalid characters.                                       | Check the tag value of the queue.                   |
| 400         | DMS.10240040 | You can only create or delete tags.                                              | You can only create or delete tags.                                              | Check whether the operation meets the requirements. |
| 400         | DMS.10240041 | You can only filter or count tags.                                               | You can only filter or count tags.                                               | Check whether the operation meets the requirements. |
| 400         | DMS.10240042 | The number of records on each page for pagination query exceeds the upper limit. | The number of records on each page for pagination query exceeds the upper limit. | Check the page size.                                |
| 400         | DMS.10240043 | The number of skipped records for pagination query exceeds the upper limit.      | The offset for pagination query exceeds the upper limit.                         | Check the paging offset.                            |
| 400         | DMS.10240044 | A maximum of 10 tags can be created.                                             | A maximum of 10 tags can be created.                                             | Check the tag quantity.                             |
| 400         | DMS.10240045 | The tag key has been used.                                                       | The tag key has been used.                                                       | Check whether the tag key has been used.            |
| 400         | DMS.10540001 | The message body contains invalid fields.                                        | The message body contains invalid fields.                                        | Check the message body.                             |

| Status Code | Error Codes  | Error Message                                                                       | Description                                                                        | Solution                                                       |
|-------------|--------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 400         | DMS.10540003 | Message ack status must be either 'success' or 'fail'. It should not be '{status}'. | Message ack status must be either success or fail. It should not be {status}.      | Check whether the status meets the requirements.               |
| 400         | DMS.10540004 | Request error                                                                       | Request error. The queue or group name does not match the handler.                 | Check whether the queue or group name matches the handler.     |
| 400         | DMS.10540010 | The request format is incorrect                                                     | The request format is incorrect. {Error description}                               | Check the request format.                                      |
| 400         | DMS.10540011 | The message size is {message size}, larger than the size limit {max allowed size}.  | The message size is {message size}, larger than the size limit {max allowed size}. | Check the request body size.                                   |
| 400         | DMS.10540012 | The message body is not in JSON format or contains invalid characters.              | The message body is not in JSON format or contains invalid characters.             | Check the message body format.                                 |
| 400         | DMS.10540014 | The URL contains invalid parameters.                                                | The URL contains invalid parameters.                                               | Check the URL parameters.                                      |
| 400         | DMS.10540202 | The request format is incorrect                                                     | The request format is incorrect. {Error description}                               | Check the request format.                                      |
| 400         | DMS.10542204 | Failed to consume messages due to {desc}.                                           | Failed to consume messages. {Error description}                                    | Check the error information and rectify the fault accordingly. |

| Status Code | Error Codes  | Error Message                                                                                                                                                                                                                                         | Description                                                                                                                                                                 | Solution                                                           |
|-------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|
| 400         | DMS.10542205 | Failed to obtain the consumption instance because the handler does not exist. This may be because the consumer instance is released 1 minute after the message is consumed. As a result, the consumer instance fails to be obtained from the handler. | Failed to obtain the consumption instance because the handler does not exist. This may be because the consumer instance is released 1 minute after the message is consumed. | Check the handler.                                                 |
| 400         | DMS.10542206 | The value of ack_wait must be within the range of 15-300.                                                                                                                                                                                             | The value of ack_wait must be within the range of 15-300.                                                                                                                   | Check the value of ack_wait.                                       |
| 400         | DMS.10542209 | The handler does not exist because the handler fails to be parsed, the message consumption times out, or the message consumption is repeatedly acknowledged.                                                                                          | The handler does not exist because the handler fails to be parsed, the message consumption times out, or the message consumption is repeatedly acknowledged.                | Check whether the handler or consumption acknowledgment times out. |
| 400         | DMS.10542214 | The request format is incorrect                                                                                                                                                                                                                       | The request format is incorrect.<br>{Error description}                                                                                                                     | Check the request format.                                          |

| Status Code | Error Codes   | Error Message                                                                       | Description                                                                         | Solution                                                       |
|-------------|---------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 400         | DMS.111400860 | Instance partition is not enough. Total partition is over the partition limitation. | Instance partition is not enough. Total partition is over the partition limitation. | Check whether the partition quantity is exceeded.              |
| 400         | DMS.40001016  | Invalid Kafka config for connector.                                                 | Invalid Kafka config for connector.                                                 | Check the configuration based on the error message and fix it. |
| 400         | DMS.40050005  | Requested topic already exists.                                                     | Requested topic already exists.                                                     | Please check the requested topic.                              |
| 400         | DMS.40050015  | Consumer group exists.                                                              | Consumer group exists.                                                              | Please check the consumer group.                               |
| 400         | DMS.50050004  | The consumer group is offline.                                                      | The consumer group is offline.                                                      | Start the consumer instance in the consumer group.             |
| 401         | DMS.10240101  | Invalid token.                                                                      | Invalid token.                                                                      | Check whether the token is valid.                              |
| 401         | DMS.10240102  | Expired token.                                                                      | The token has expired.                                                              | Check whether the token has expired.                           |
| 401         | DMS.10240103  | Missing token.                                                                      | The token is missing.                                                               | Check whether the token is missing.                            |
| 401         | DMS.10240104  | The project ID and token do not match.                                              | The project ID and token do not match.                                              | Check whether the project ID matches the token.                |
| 403         | DMS.00403002  | A tenant has the read-only permission and cannot perform operations on DMS.         | You cannot perform operations on DMS because you only have read permissions.        | Check the tenant permission.                                   |

| Status Code | Error Codes  | Error Message                                                                         | Description                                                                    | Solution                                                                  |
|-------------|--------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| 403         | DMS.00403003 | This role does not have the permissions to perform this operation.                    | This role does not have the permissions to perform this operation.             | Check the role permission.                                                |
| 403         | DMS.00403007 | Authorization denied.                                                                 | Action does not allow to performed.                                            | Plese check your permissions.                                             |
| 403         | DMS.10240304 | Change the quota of a queue or consumer group to a value smaller than the used quota. | The quota of a queue or consumer group cannot be smaller than the used amount. | Check the quota.                                                          |
| 403         | DMS.10240306 | The tenant has been frozen. You cannot perform operations on DMS.                     | The tenant has been frozen. You cannot perform operations on DMS.              | Check the tenant status.                                                  |
| 403         | DMS.10240307 | The consumer group quota must be within the range of 1-10.                            | The consumer group quota must be within the range of 1-10.                     | Check whether the number of consumer groups exceeds the quota.            |
| 403         | DMS.10240308 | The queue quota must be within the range of 1-20.                                     | The queue quota must be within the range of 1-20.                              | Check whether the number of queues exceeds the quota.                     |
| 403         | DMS.10240309 | Access denied. You cannot perform operations on DMS.                                  | Access denied. You cannot perform operations on DMS.                           | Check whether you have the permission required to perform this operation. |
| 403         | DMS.10240310 | A tenant has the read-only permission and cannot perform operations on DMS.           | The tenant has read-only permissions and cannot perform operations on DMS.     | Check the tenant permission.                                              |

| Status Code | Error Codes      | Error Message                                                      | Description                                                                    | Solution                                                   |
|-------------|------------------|--------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------|
| 403         | DMS.1024031<br>1 | This role does not have the permissions to perform this operation. | This role does not have the permissions required to perform operations on DMS. | Check the role permission.                                 |
| 403         | DMS.1024031<br>2 | The tenant is restricted and cannot perform operations on DMS.     | The tenant is restricted and cannot perform operations on DMS.                 | Check the role permission.                                 |
| 404         | DMS.0040400<br>1 | The requested URL does not exist.                                  | The requested URL does not exist.                                              | Check the URL.                                             |
| 404         | DMS.0040402<br>2 | This instance does not exist.                                      | The instance does not exist.                                                   | Check whether the instance exists.                         |
| 404         | DMS.0040402<br>4 | Connector does not exist.                                          | Connector does not exist.                                                      | Check the connector.                                       |
| 404         | DMS.0040402<br>6 | The dumping task does not exist.                                   | The dumping task does not exist.                                               | Check the dumping task.                                    |
| 404         | DMS.0040402<br>7 | Connector already exists.                                          | Connector already exists.                                                      | Check the connector.                                       |
| 404         | DMS.0040402<br>9 | The dumping task quota has been reached.                           | The dumping task quota has been reached.                                       | Check the dumping task quota.                              |
| 404         | DMS.1024040<br>1 | The queue ID is incorrect or not found.                            | The queue ID is incorrect or is not found.                                     | Check whether the queue ID exists and is correct.          |
| 404         | DMS.1024040<br>5 | The consumption group ID is incorrect or not found.                | The consumption group ID is incorrect or is not found.                         | Check whether the consumer group ID exists and is correct. |



| Status Code | Error Codes   | Error Message                                                                         | Description                                                                                     | Solution                                                 |
|-------------|---------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| 404         | DMS.10240406  | The URL or endpoint does not exist.                                                   | The URL or endpoint does not exist.                                                             | Check whether the URL or endpoint exists and is correct. |
| 404         | DMS.10240407  | The request is too frequent. Flow control is being performed. Please try again later. | The request is sent too frequently and flow control is being performed. Please try again later. | Try again later.                                         |
| 404         | DMS.10240426  | No tag containing this key exists.                                                    | No tags containing this key exist.                                                              | Check the tag.                                           |
| 404         | DMS.10540401  | The queue name does not exist.                                                        | The queue name does not exist.                                                                  | Check whether the queue name exists.                     |
| 405         | DMS.00405001  | This request method is not allowed.                                                   | The request method is not allowed.                                                              | Check the request method.                                |
| 408         | DMS.111501024 | Query timed out                                                                       | Message query timeout                                                                           | Please query later                                       |
| 500         | 111500032     | Create order failed.                                                                  | Create order failed.                                                                            | Please contact technical support.                        |
| 500         | DMS.00500000  | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |
| 500         | DMS.00500006  | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |
| 500         | DMS.005000017 | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |
| 500         | DMS.005000024 | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |
| 500         | DMS.005000025 | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |
| 500         | DMS.005000041 | Internal service error.                                                               | Internal service error.                                                                         | Contact technical support.                               |

| Status Code | Error Codes  | Error Message                                                          | Description                                         | Solution                                                  |
|-------------|--------------|------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|
| 500         | DMS.00500052 | Internal service error.                                                | Failed to submit the instance upgrade job.          | Contact technical support.                                |
| 500         | DMS.00500053 | Internal service error.                                                | The specified instance node is not found.           | Contact technical support.                                |
| 500         | DMS.00500054 | Internal service error.                                                | Failed to generate the password.                    | Contact technical support.                                |
| 500         | DMS.00500070 | Internal service error.                                                | Failed to configure the instance.                   | Contact technical support.                                |
| 500         | DMS.00500071 | Internal service error.                                                | Failed to create the instance backup policy.        | Contact technical support.                                |
| 500         | DMS.00500094 | Internal service error.                                                | Internal service error.                             | Contact technical support.                                |
| 500         | DMS.00500106 | Internal service error.                                                | Internal service error.                             | Contact technical support.                                |
| 500         | DMS.00500990 | Failed to update topics.                                               | Failed to update topics.                            | Contact technical support.                                |
| 500         | DMS.00501000 | Failed to create agency, may be you do not have the agency permission. | Failed to create agency                             | check whether the current user has the agency permission. |
| 500         | DMS.00501001 | Failed to get agency roleId.                                           | Failed to get agency roleId.                        | retry the request later                                   |
| 500         | DMS.00501002 | Failed to query agency roleId.                                         | Failed to query the role ID based on the role name. | Check whether the role name in the request is correct.    |
| 500         | DMS.00501003 | Failed to grant role to agency.                                        | Failed to grant role to agency.                     | Try again later, or contact technical support             |

| Status Code | Error Codes   | Error Message                             | Description                               | Solution                                                                                                                         |
|-------------|---------------|-------------------------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 500         | DMS.00501010  | The product specification does not exist. | The product specification does not exist. | Contact technical support.                                                                                                       |
| 500         | DMS.00501011  | Failed to query the product ID from CBC.  | Failed to query the product ID from CBC.  | Contact technical support.                                                                                                       |
| 500         | DMS.00501012  | Smart Connect tasks exist.                | Smart Connect tasks exist.                | Delete all Smart Connect tasks.                                                                                                  |
| 500         | DMS.10250002  | Internal service error.                   | Internal service error.                   | Contact technical support.                                                                                                       |
| 500         | DMS.10250003  | Internal service error.                   | Internal service error.                   | Contact technical support.                                                                                                       |
| 500         | DMS.10250004  | Internal service error.                   | Internal service error.                   | Contact technical support.                                                                                                       |
| 500         | DMS.10250005  | Internal communication error.             | Internal communication error.             | Contact technical support.                                                                                                       |
| 500         | DMS.10250006  | Internal service error.                   | Internal service error.                   | Contact technical support.                                                                                                       |
| 500         | DMS.10550035  | tag_type must be either or or and.        | tag_type must be either 'or' or 'and'.    | Check tag_type.                                                                                                                  |
| 501         | DMS.00501118  | Insufficient CPU quota.                   | Insufficient CPU quota.                   | Apply for CPU quota.                                                                                                             |
| 501         | DMS.111501026 | Maximum bytes per query reached.          | Maximum bytes per query reached.          | Shorten the time range to ensure that the number of queried bytes does not exceed the limit, or use other methods to query data. |
| 503         | DMS.111501025 | Query Busy. Please try again later.       | Message query busy                        | Please query later                                                                                                               |

## 9.3 Instance Statuses

**Table 9-2** Instance status description

| Status         | Description                                                                                                                                     |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| CREATING       | The instance is being created.                                                                                                                  |
| RUNNING        | The instance is running properly. Instances in this state can provide services.                                                                 |
| ERROR          | The instance is not running properly.                                                                                                           |
| RESTARTING     | The instance is being restarted.                                                                                                                |
| STARTING       | The status between <b>Frozen</b> and <b>Running</b> .                                                                                           |
| EXTENDING      | The instance specifications are being changed.                                                                                                  |
| EXTENDEDFAILED | The instance specifications failed to be changed.                                                                                               |
| FROZEN         | The instance has been frozen due to insufficient account balance. You can unfreeze the instance by topping up your account in <b>My Order</b> . |
| FREEZING       | The status between <b>Running</b> and <b>Frozen</b> .                                                                                           |
| UPGRADING      | The instance is being upgraded.                                                                                                                 |
| ROLLINGBACK    | The instance is being rolled back.                                                                                                              |
| DELETING       | The instance is being deleted.                                                                                                                  |

## 9.4 Obtaining a Project ID

### Scenario

A project ID is required for some URLs when an API is called. Obtain a project ID using either of the following methods:

- [Obtaining a Project ID by Calling an API](#)
- [Obtaining a Project ID on the Console](#)

### Obtaining a Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is **GET https://{Endpoint}/v3/projects**, where *{Endpoint}* indicates the IAM endpoint. You can obtain the IAM endpoint from [Regions and Endpoints](#). For details on API calling authentication, see [Authentication](#).

The following is an example response. The value of **id** in the **projects** section is the project ID:

```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "xxx-xxx-xxx",
      "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 on the Console

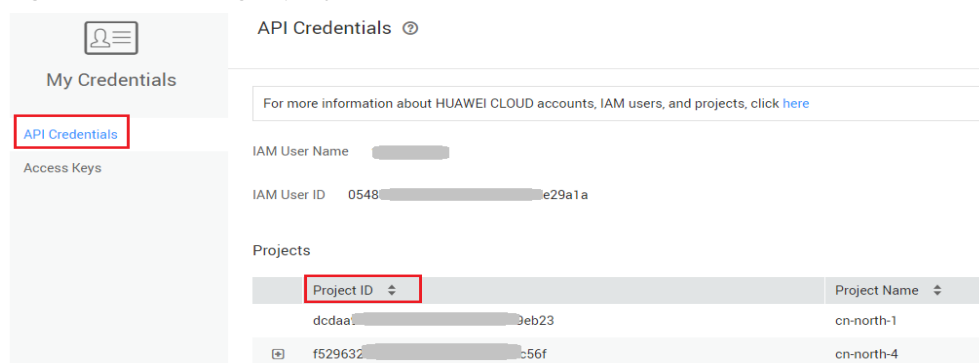
A project ID is required for some URLs when an API is called. You can obtain a project ID on the console.

The following procedure describes how to obtain a project ID:

- Step 1** Log in to the management console.
- Step 2** Hover the mouse pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

On the **API Credentials** page, view the project ID in the project list.

**Figure 9-1** Viewing a project ID



----End

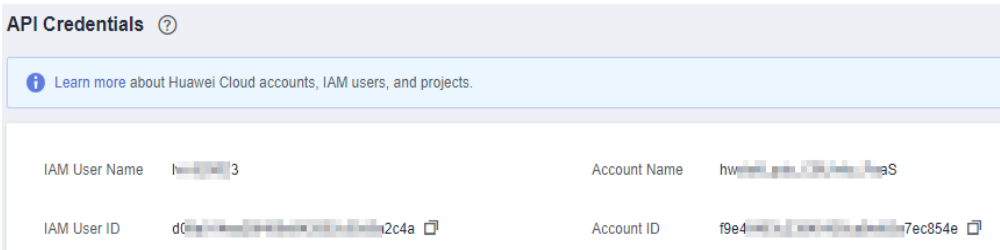
## 9.5 Obtaining the Account Name and Account ID

The account name and account ID are required for some URLs when an API is called. The following procedure describes how to obtain the domain and domain ID:

1. Log in to the console.
2. Hover the mouse pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

View the account name and account ID.

**Figure 9-2** Viewing the account name and account ID



# A Change History

| Released On | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2025-06-20  | <p>This issue incorporates the following changes:</p> <ul style="list-style-type: none"><li>• Added parameters <b>proxy_enable</b>, <b>arch_type</b>, and <b>tls_mode</b> in <a href="#">Creating an Instance</a>.</li><li>• Added the API for <a href="#">enabling the domain name access to a RocketMQ instance</a>.</li><li>• Added parameter <b>queue</b> in <a href="#">Querying Messages</a>.</li><li>• Added the API for <a href="#">sending messages</a>.</li><li>• Added APIs for <a href="#">instance diagnosis</a> and <a href="#">background task management</a>.</li><li>• Added the API for <a href="#">instance management</a>.</li><li>• Added APIs for <a href="#">querying product specifications</a> and <a href="#">querying vCPUs of a RocketMQ product flavor</a>.</li></ul> |
| 2024-07-05  | <p>This issue incorporates the following change:</p> <p>Added an example <a href="#">Creating Topics in Batches</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 2023-12-15  | <p>This issue incorporates the following changes:</p> <p>Added the APIs for <a href="#">querying product information for instance specification modification</a> and <a href="#">modifying instance specifications</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2023-06-06  | <p>This issue incorporates the following change:</p> <p>Added the APIs for creating a metadata migration task, querying a specified or all migration tasks of an instance, and deleting a metadata migration task.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 2023-04-21  | <p>This issue incorporates the following change:</p> <p>Added the API for <a href="#">Querying the Consumer List</a>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Released On | Description                                                                                                                                                                                                                                                                                                                                 |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023-02-17  | This issue incorporates the following changes: <ul style="list-style-type: none"><li>• Updated the URI for the <a href="#">Creating an Instance</a> API.</li><li>• Added the <a href="#">Adding or Deleting Instance Tags in Batches</a>, <a href="#">Querying Instance Tags</a>, and <a href="#">Querying Project Tags</a> APIs.</li></ul> |
| 2023-01-13  | This issue incorporates the following change:<br>Added the API for <a href="#">Querying the Topic List</a> .                                                                                                                                                                                                                                |
| 2022-06-30  | This issue is the first official release.                                                                                                                                                                                                                                                                                                   |