

# Distributed Message Service for Kafka

## API Reference

**Issue** 04  
**Date** 2022-06-30



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# 1 Before You Start

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## 1.1 Overview

Welcome to *Distributed Message Service for Kafka API Reference*. Distributed Message Service (DMS) for Kafka is a message queuing service that is based on the open-source Apache Kafka. It provides Kafka premium instances with isolated computing, storage, and bandwidth resources. DMS for Kafka allows you to apply resources, configure topics, partitions, and replicas based on service requirements. The service can be used out of the box and frees you from deployment and O&M so that you can focus on the agile development of your applications.

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

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### NOTICE

DMS for Kafka 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 Kafka is backward compatible with existing APIs. When using DMS for Kafka, you should recognize and ignore unused parameters and parameter values in JSON responses.

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## 1.2 API Calling

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

## 1.3 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](#).

## 1.4 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 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, computing, 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.
- **Enterprise project**  
Enterprise projects group and manage resources across regions. Resources in different enterprise projects are logically isolated. An enterprise project can contain resources of multiple regions, and resources can be added to or removed from enterprise projects.

# 2 API Overview

Table 2-1 APIs

APIs	Description
<b>Lifecycle management APIs</b>	Create instances, modify instance information, and query, delete, and restart instances.
<b>Instance management APIs</b>	Reset the password, reset Kafka Manager password, restart Kafka Manager, configure automatic topic creation, modify the private IP address for cross-VPC access, query Kafka cluster metadata, query consumer group details, reset consumer group offset to the specified position, query coordinator details of a Kafka instance, add partitions to a topic for a Kafka instance, query the disk usage status of topics, query all consumer groups, and reassign replicas of a topic for a Kafka instance.
<b>Specification modification management APIs</b>	Query product information for instance specification modification, and modify instance specifications.
<b>Topic management APIs</b>	Create a topic for a Kafka instance, list topics of a Kafka instance, modify topics of a Kafka instance, delete topics of a kafka instance in batches, and query details about a topic.
<b>User management APIs</b>	List users, create a user, delete a user, reset the user password, query user permissions, and configure user permissions.
<b>Message query APIs</b>	Query a message with a specified offset, query a message with a specified time period, and query offset of the earliest or latest message in a partition.
<b>Background task management APIs</b>	List background tasks, query a background task, and delete a background task.
<b>Tag management APIs</b>	Add or delete tags in batches, list tags of an instance, and list tags of a project.



APIs	Description
<a href="#">Other APIs</a>	List AZ information, query product specifications, query Kafka instance monitoring dimensions, and list maintenance time windows.

# 3 Calling APIs

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## 3.1 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token** as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

### Request URI

A request URI is in the following format:

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

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

- **URI-scheme:**  
Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:**  
Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from Regions and Endpoints.  
For example, the endpoint of IAM in the **EU-Dublin** region is **iam.eu-west-101.myhuaweicloud.com**.
- **resource-path:**  
Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to **obtain a user token** is **/v3/auth/tokens**.
- **query-string:**  
Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "*Parameter name=Parameter value*". For example, **?limit=10** indicates that a maximum of 10 data records will be displayed.

For example, to obtain an IAM token in the **EU-Dublin** region, obtain the endpoint of IAM (**iam.myhuaweicloud.eu**) for this region and the **resource-path** (**/v3/**

**auth/tokens**) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.eu-west-101.myhuaweicloud.com/v3/auth/tokens
```

#### NOTE

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

## Request Methods

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

- **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 to **obtain a user token**, the request method is **POST**. The request is as follows:

```
https://iam.eu-west-101.myhuaweicloud.com/v3/auth/tokens
```

## Request Header

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

Common request headers are as follows:

- **Content-Type**: specifies the request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **X-Auth-Token**: specifies a user token only for token-based API authentication. The user token is a response to the API used to **obtain a user token**. This API is the only one that does not require authentication.

#### 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](#).

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

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

## Request Body

The body of a request is often sent in a structured format as specified in the **Content-Type** header field. 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.

In the case of the API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace **username**, **domainname**, **\*\*\*\*\*** (login password), and **xxxxxxxxxxxxxxxxxxxx** (project name) with the actual values (for example, ). The project name can be obtained from Regions and Endpoints.

### NOTE

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

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

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

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

## 3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK 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

#### 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 to [obtain a user token](#), you must set **auth.scope** in the request body to **project**.

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

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

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3/auth/projects
```

```
Content-Type: application/json  
X-Auth-Token: ABCDEFJ....
```

## 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.

---

# 4 Getting Started

## Scenarios

This section describes how to call an API to create a Kafka 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

- IAM endpoint obtained from Regions and Endpoints.
- Kafka endpoint obtained from Regions and Endpoints.

## Creating a Kafka Instance

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

```
{
  "name": "kafka-demo",
  "engine": "kafka",
  "engine_version": "2.3.0",
  "specification": "100MB",
  "storage_space": 600,
  "partition_num": 300,
  "vpc_id": "60fc80a5-35db-45a9-acdb-0ef2361e1088",
  "security_group_id": "d8c81e0f-de6a-4110-8c96-81af3eacb3d1",
  "subnet_id": "45767e73-a093-4a1c-8cdd-b8d664b34dcc",
  "available_zones": [
    "72d50cedc49846b9b42c21495f38d81c"
  ],
  "product_id": "00300-30308-0--0",
  "kafka_manager_user": "test",
  "kafka_manager_password": "Z***x",
  "storage_spec_code": "dms.physical.storage.high"
}
```

- **name**: name of the instance.
- **engine**: message engine. The value is **kafka**.
- **engine\_version**: version of the message engine.
- **specification**: bandwidth of the instance. For details about the value range, see [Creating an Instance](#).
- **storage\_space**: message storage space in GB. For details about the value range, see [Creating an Instance](#).

- **partition\_num**: maximum number of partitions in a Kafka instance. For details about the value range, see section [Creating an Instance](#).
- **vpc\_id**: ID of the Virtual Private Cloud (VPC) where the instance resides. For details about the value range, see [Creating an Instance](#).
- **security\_group\_id**: ID of the security group. For details about the value range, see [Creating an Instance](#).
- **subnet\_id**: ID of the VPC subnet. For details about the value range, see [Creating an Instance](#).
- **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. Obtain the value by calling the API described in [Querying Product Specifications](#).
- **kafka\_manager\_user**: username for logging in to Kafka Manager
- **kafka\_manager\_password**: password for logging in to Kafka Manager
- **storage\_spec\_code**: storage I/O specification. For details about the value range, see [Creating an Instance](#).



# 5 APIs V2 (Recommended)

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## 5.1 Lifecycle Management

### 5.1.1 Creating an Instance

#### Function

This API is used to create a pay-per-use Kafka instance.

#### URI

POST /v2/{project\_id}/instances

**Table 5-1** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

#### Request Parameters

**Table 5-2** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name. An instance name starts with a letter, consists of 4 to 64 characters, and can contain only letters, digits, underscores (_), and hyphens (-).

Parameter	Mandatory	Type	Description
description	No	String	Instance description. The description can contain a maximum of 1024 characters. <b>NOTE</b> 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>kafka</b> .
engine_version	Yes	String	Version of the message engine. Value: <b>1.1.0</b> and <b>2.3.0</b> .
specification	No	String	This parameter indicates the bandwidth of the instance, that is, the maximum amount of data that can be transferred per unit time. Unit: MB. Options: <ul style="list-style-type: none"> <li>● 100MB</li> <li>● 300MB</li> <li>● 600MB</li> <li>● 1200MB</li> </ul>
broker_num	No	Integer	Number of brokers.
storage_space	Yes	Integer	Message storage space in GB. Value range: <ul style="list-style-type: none"> <li>● 600–90,000 GB for 100 MB/s Kafka instances</li> <li>● 1200–90,000 GB for 300 MB/s Kafka instances</li> <li>● 2400–90,000 GB for 600 MB/s Kafka instances</li> <li>● 4800–90,000 GB for 1200 MB/s Kafka instances</li> </ul>

Parameter	Mandatory	Type	Description
partition_num	No	Integer	<p>Maximum number of partitions in a Kafka instance.</p> <ul style="list-style-type: none"> <li>• The value is <b>300</b> when <b>specification</b> is <b>100MB</b>.</li> <li>• The value is <b>900</b> when <b>specification</b> is <b>300MB</b>.</li> <li>• The value is <b>1800</b> when <b>specification</b> is <b>600MB</b>.</li> <li>• The value is <b>1800</b> when <b>specification</b> is <b>1200MB</b>.</li> </ul>
access_user	No	String	<p>This parameter is mandatory when <b>ssl_enable</b> is set to <b>true</b>. This parameter is invalid when <b>ssl_enable</b> is set to <b>false</b>.</p> <p>The username must be 4 to 64 characters long and can contain only letters, digits, and hyphens (-).</p>
password	No	String	<p>This parameter is mandatory when <b>ssl_enable</b> is set to <b>true</b>. This parameter is invalid when <b>ssl_enable</b> is set to <b>false</b>.</p> <p>Instance password.</p> <p>The password must meet the following complexity requirements:</p> <ul style="list-style-type: none"> <li>• Contains 8 to 32 characters.</li> <li>• Contains at least two of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#\$%^&amp;*()-_+= []{}:"'&lt;&gt;/?</li> </ul> </li> </ul>
vpc_id	Yes	String	<p>VPC ID.To obtain it, log in to the VPC console and view the VPC ID on the VPC details page.</p>

Parameter	Mandatory	Type	Description
security_group_id	Yes	String	ID of the security group to which the instance belongs. To obtain it, log in to the VPC console and view the security group ID on the security group details page.
subnet_id	Yes	String	Subnet information. 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.
available_zones	Yes	Array of strings	ID of the AZ where instance brokers reside and which has available resources. This parameter cannot be empty or null. A Kafka instance can be deployed in 1 AZ or at least 3 AZs. When specifying AZs for brokers, separate multiple AZs with commas (,).
product_id	Yes	String	Product ID. The product ID can be obtained by calling the <b>Querying Product Specifications List</b> API. The product ID format may vary depending on the site. One format contains both digits and letters, for example, <b>c6.2u4g.cluster</b> . The other format contains only digits, for example, <b>00300-30308-0--0</b> .
kafka_manager_user	Yes	String	Username for logging in to Kafka Manager. The username consists of 4 to 64 characters and can contain only letters, digits, and hyphens (-).

Parameter	Mandatory	Type	Description
kafka_manager_password	Yes	String	<p>Password for logging in to Kafka Manager.</p> <p>The password must meet the following complexity requirements:</p> <ul style="list-style-type: none"> <li>• Contains 8 to 32 characters.</li> <li>• Contains at least two of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#\$%^&amp;*()-_+= []:;'"&lt;,.&gt;/?`</li> </ul> </li> </ul>
maintain_begin	No	String	<p>Time at which the maintenance time window starts. Format: HH:mm.- The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window.- The start time must be set to 22:00, 02:00, 06:00, 10:00, 14:00, or 18:00.- The start time and end time must be set in pairs. If the start time is left blank, the end time must also be left blank. In this case, the system automatically sets the start time to 02:00.</p>

Parameter	Mandatory	Type	Description
maintain_end	No	String	Time at which the maintenance time window ends. Format: HH:mm.- The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window.- The end time is four hours later than the start time. For example, if the start time is 22:00, the end time is 02:00.- The start time and end time must be set in pairs. If the end time is left blank, the start time is also left blank. In this case, the system automatically sets the end time to 06:00.
enable_publicip	No	Boolean	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>
public_bandwidth	No	Integer	Public network bandwidth. Unit: Mbit/s.
publicip_id	No	String	ID of the EIP bound to the 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> ).
ssl_enable	No	Boolean	Whether to enable SSL encryption for access. This setting is fixed once the instance is created. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>

Parameter	Mandatory	Type	Description
retention_policy	No	String	Action to be taken when the memory usage reaches the disk capacity threshold. The value can be: <ul style="list-style-type: none"> <li>• <b>produce_reject</b>: New messages cannot be created.</li> <li>• <b>time_base</b>: The earliest messages are deleted.</li> </ul>
enable_auto_topic	No	Boolean	Whether to enable automatic topic creation. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul> If it is enabled, a topic will be automatically created with 3 partitions and 3 replicas when a message is created in or retrieved from a topic that does not exist. The default value is <b>false</b> .
storage_spec_code	Yes	String	Storage I/O specification. - <b>dms.physical.storage.high</b> or <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>100MB</b> - <b>dms.physical.storage.high</b> or <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>300MB</b> - <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>600MB</b> - <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>1200MB</b> For details on how to select a disk type, see "Disk Types and Disk Performance".
enterprise_project_id	No	String	Enterprise project ID. This parameter is mandatory for an enterprise project account.
tags	No	Array of <b>TagEntity</b> objects	Tag list.

**Table 5-3** TagEntity

Parameter	Mandatory	Type	Description
key	No	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /
value	No	String	Tag value, which can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /

## Response Parameters

Status code: 200

**Table 5-4** Response body parameters

Parameter	Type	Description
instance_id	String	Instance ID.

## Example Requests

```
{
  "name" : "kafka-test",
  "description" : "",
  "engine" : "kafka",
  "engine_version" : "1.1.0",
  "storage_space" : 300,
  "kafka_manager_user" : "root",
  "kafka_manager_password" : "*****",
  "vpc_id" : "23921d2a-****-****-5f2fa5327a48",
  "security_group_id" : "2e888928-****-****-e36c6520d473",
  "subnet_id" : "37bb12c9-****-****-ae8f7d336ab6",
  "available_zones" : [ "a0865121f83b41cbafce65930a22a6e8" ],
  "product_id" : "00300-30310-0--0",
  "maintain_begin" : "22:00",
  "maintain_end" : "02:00",
  "ssl_enable" : true,
  "enable_publicip" : true,
  "publicip_id" : ""
}
```



```

"access_user" : "root",
"password" : "*****",
"enterprise_project_id" : "0",
"specification" : "300MB",
"partition_num" : 900,
"retention_policy" : "time_base",
"public_boundwidth" : 3,
"connector_enable" : false,
"enable_auto_topic" : true,
"storage_spec_code" : "dms.physical.storage.ultra",
"tags" : [ {
  "key" : "key1",
  "value" : "value1"
}, {
  "key" : "key2",
  "value" : "value2"
} ]
}

```

## Example Responses

**Status code: 200**

An instance is created successfully.

```

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

```

## Status Codes

Status Code	Description
200	An instance is created successfully.

## Error Codes

See [Error Codes](#).

## 5.1.2 Listing All Instances

### Function

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

### URI

GET /v2/{project\_id}/instances

**Table 5-5** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

**Table 5-6** Query Parameters

Parameter	Mandatory	Type	Description
engine	No	String	Message engine. Value: <b>kafka</b> .
name	No	String	Instance name.
instance_id	No	String	Instance ID.
status	No	String	Instance status.
include_failure	No	String	Whether to return the number of instances that fail to be created.  If the value is <b>true</b> , the number of instances that failed to be created is returned. If the value is not <b>true</b> , the number is not returned.
exact_match_name	No	String	Whether to search for the instance that precisely matches a specified instance name.  The default value is <i>false</i> , indicating that a fuzzy search is performed based on a specified instance name. If the value is <b>true</b> , the instance that precisely matches a specified instance name is queried.
enterprise_project_id	No	String	Enterprise project ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-7** Response body parameters

Parameter	Type	Description
instances	Array of <a href="#">ShowInstanceResp</a> objects	Instance list.

Parameter	Type	Description
instance_num	Integer	Number of instances.

**Table 5-8** ShowInstanceResp

Parameter	Type	Description
name	String	Instance name.
engine	String	Message engine.
engine_version	String	Version.
description	String	Instance description
specification	String	Instance specifications.
storage_space	Integer	Message storage space in GB.
partition_num	String	Number of partitions in a Kafka instance.
used_storage_space	Integer	Used message storage space in GB.
connect_address	String	IP address of an instance.
port	Integer	Port of an instance.
status	String	Instance status.
instance_id	String	Instance ID.
resource_spec_code	String	Resource specification code. <ul style="list-style-type: none"> <li>● <b>dms.instance.kafka.cluster.c3.mini</b>: Kafka instance with 100 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.small.2</b>: Kafka instance with 300 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.middle.2</b>: Kafka instance with 600 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.high.2</b>: Kafka instance with 1200 MB/s bandwidth</li> </ul>
charging_mode	Integer	Billing mode. 1: pay-per-use.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.

Parameter	Type	Description
created_at	String	Time when the instance was created. 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.
subnet_name	String	Subnet name.
subnet_cidr	String	Subnet CIDR block.
user_id	String	User ID.
user_name	String	Username.
access_user	String	Username for accessing the instance.
order_id	String	Order ID. This parameter has a value only when the billing mode is yearly/monthly.
maintain_begin	String	Time at which the maintenance time window starts. The format is HH:mm:ss.
maintain_end	String	Time at which the maintenance time window ends. The format is HH:mm:ss.
enable_publicip	Boolean	Whether public access is enabled for the instance. <ul style="list-style-type: none"> <li>• <b>true</b>: enabled</li> <li>• <b>false</b>: disabled</li> </ul>
management_connect_address	String	Connection address of Kafka Manager of the Kafka instance.
ssl_enable	Boolean	Whether security authentication is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disabled</li> </ul>
ssl_two_way_enable	Boolean	Indicates whether to enable two-way authentication.
cert_replaced	Boolean	Whether the certificate can be replaced.
public_management_connect_address	String	Address for accessing Kafka Manager over public networks.
enterprise_project_id	String	Enterprise project ID.

Parameter	Type	Description
is_logical_volume	Boolean	Whether the instance is a new instance. This parameter is used to distinguish old instances from new instances during instance capacity expansion. <ul style="list-style-type: none"> <li>• <b>true</b>: New instance, which allows dynamic disk capacity expansion without restarting the instance.</li> <li>• <b>false</b>: Old instance.</li> </ul>
extend_times	Integer	Number of disk expansion times. If the value exceeds 20, disk expansion is no longer allowed.
enable_auto_topic	Boolean	Whether automatic topic creation is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: enabled</li> <li>• <b>false</b>: disabled</li> </ul>
type	String	Instance type. The value can be <b>cluster</b> .
product_id	String	Product ID.
security_group_id	String	Security group ID.
security_group_name	String	Security group name.
subnet_id	String	Subnet ID.
available_zones	Array of strings	AZ to which the instance brokers belong. The AZ ID is returned.
total_storage_space	Integer	Message storage space in GB.
public_connect_address	String	Instance public access address. This parameter is available only when public access is enabled for the instance.
storage_resource_id	String	Storage resource ID.
storage_spec_code	String	I/O specifications.
service_type	String	Service type.
storage_type	String	Storage class.
retention_policy	String	Message retention policy.
kafka_public_status	String	Whether public access is enabled for Kafka.

Parameter	Type	Description
public_bandwidth	Integer	Public network access bandwidth.
kafka_manager_user	String	Username for logging in to Kafka Manager.
enable_log_collection	Boolean	Whether log collection is enabled.
cross_vpc_info	String	Cross-VPC access information.
ipv6_enable	Boolean	Whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	IPv6 connection address.
rest_enable	Boolean	Whether Kafka REST is enabled.
rest_connect_address	String	Kafka REST connection address.
public_bandwidth	Integer	Public network access bandwidth. To be deleted.
message_query_inst_enable	Boolean	Whether message query is enabled.
vpc_client_plain	Boolean	Whether intra-VPC plaintext access is enabled.
support_features	String	List of features supported by the Kafka instance.
trace_enable	Boolean	Whether message tracing is enabled.
agent_enable	Boolean	Indicates whether the proxy is enabled.
pod_connect_address	String	Connection address on the tenant side.
disk_encrypted	Boolean	Whether disk encryption is enabled.
disk_encrypted_key	String	Disk encryption key. If disk encryption is not enabled, this parameter is left blank.
kafka_private_connect_address	String	Private connection address of a Kafka instance.
ces_version	String	Cloud Eye version.
public_access_enabled	String	Time when public access was enabled for an instance. The value can be <b>true</b> , <b>actived</b> , <b>closed</b> , or <b>false</b> .
node_num	Integer	Node quantity.

Parameter	Type	Description
enable_acl	Boolean	Indicates whether access control is enabled.
new_spec_billing_enable	Boolean	Whether billing based on new specifications is enabled.
broker_num	Integer	Broker quantity.
tags	Array of <b>TagEntity</b> objects	Tag list.
dr_enable	Boolean	Indicates whether DR is enabled.

**Table 5-9** TagEntity

Parameter	Type	Description
key	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /
value	String	Tag value, which can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /

## Example Requests

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

## Example Responses

None

## Status Codes

Status Code	Description
200	All instances are listed 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.

### URI

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

**Table 5-10** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-11** Response body parameters

Parameter	Type	Description
name	String	Instance name.
engine	String	Message engine.
engine_version	String	Version.
description	String	Instance description
specification	String	Instance specifications.
storage_space	Integer	Message storage space in GB.
partition_num	String	Number of partitions in a Kafka instance.
used_storage_space	Integer	Used message storage space in GB.



Parameter	Type	Description
connect_address	String	IP address of an instance.
port	Integer	Port of an instance.
status	String	Instance status.
instance_id	String	Instance ID.
resource_spec_code	String	Resource specification code. <ul style="list-style-type: none"> <li>● <b>dms.instance.kafka.cluster.c3.mini</b>: Kafka instance with 100 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.small.2</b>: Kafka instance with 300 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.middle.2</b>: Kafka instance with 600 MB/s bandwidth</li> <li>● <b>dms.instance.kafka.cluster.c3.high.2</b>: Kafka instance with 1200 MB/s bandwidth</li> </ul>
charging_mode	Integer	Billing mode. 1: pay-per-use.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.
created_at	String	Time when the instance was created. 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.
subnet_name	String	Subnet name.
subnet_cidr	String	Subnet CIDR block.
user_id	String	User ID.
user_name	String	Username.
access_user	String	Username for accessing the instance.
order_id	String	Order ID. This parameter has a value only when the billing mode is yearly/monthly.
maintain_begin	String	Time at which the maintenance time window starts. The format is HH:mm:ss.
maintain_end	String	Time at which the maintenance time window ends. The format is HH:mm:ss.

Parameter	Type	Description
enable_publicip	Boolean	Whether public access is enabled for the instance. <ul style="list-style-type: none"> <li>● <b>true</b>: enabled</li> <li>● <b>false</b>: disabled</li> </ul>
management_connect_address	String	Connection address of Kafka Manager of the Kafka instance.
ssl_enable	Boolean	Whether security authentication is enabled. <ul style="list-style-type: none"> <li>● <b>true</b>: enable</li> <li>● <b>false</b>: disabled</li> </ul>
ssl_two_way_enable	Boolean	Indicates whether to enable two-way authentication.
cert_replaced	Boolean	Whether the certificate can be replaced.
public_management_connect_address	String	Address for accessing Kafka Manager over public networks.
enterprise_project_id	String	Enterprise project ID.
is_logical_volume	Boolean	Whether the instance is a new instance. This parameter is used to distinguish old instances from new instances during instance capacity expansion. <ul style="list-style-type: none"> <li>● <b>true</b>: New instance, which allows dynamic disk capacity expansion without restarting the instance.</li> <li>● <b>false</b>: Old instance.</li> </ul>
extend_times	Integer	Number of disk expansion times. If the value exceeds 20, disk expansion is no longer allowed.
enable_auto_topic	Boolean	Whether automatic topic creation is enabled. <ul style="list-style-type: none"> <li>● <b>true</b>: enabled</li> <li>● <b>false</b>: disabled</li> </ul>
type	String	Instance type. The value can be <b>cluster</b> .
product_id	String	Product ID.
security_group_id	String	Security group ID.
security_group_name	String	Security group name.

Parameter	Type	Description
subnet_id	String	Subnet ID.
available_zones	Array of strings	AZ to which the instance brokers belong. The AZ ID is returned.
total_storage_space	Integer	Message storage space in GB.
public_connect_address	String	Instance public access address. This parameter is available only when public access is enabled for the instance.
storage_resource_id	String	Storage resource ID.
storage_spec_code	String	I/O specifications.
service_type	String	Service type.
storage_type	String	Storage class.
retention_policy	String	Message retention policy.
kafka_public_status	String	Whether public access is enabled for Kafka.
public_bandwidth	Integer	Public network access bandwidth.
kafka_manager_user	String	Username for logging in to Kafka Manager.
enable_log_collection	Boolean	Whether log collection is enabled.
cross_vpc_info	String	Cross-VPC access information.
ipv6_enable	Boolean	Whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	IPv6 connection address.
rest_enable	Boolean	Whether Kafka REST is enabled.
rest_connect_address	String	Kafka REST connection address.
public_bandwidth	Integer	Public network access bandwidth. To be deleted.
message_query_inst_enable	Boolean	Whether message query is enabled.
vpc_client_plain	Boolean	Whether intra-VPC plaintext access is enabled.

Parameter	Type	Description
support_features	String	List of features supported by the Kafka instance.
trace_enable	Boolean	Whether message tracing is enabled.
agent_enable	Boolean	Indicates whether the proxy is enabled.
pod_connect_address	String	Connection address on the tenant side.
disk_encrypted	Boolean	Whether disk encryption is enabled.
disk_encrypted_key	String	Disk encryption key. If disk encryption is not enabled, this parameter is left blank.
kafka_private_connect_address	String	Private connection address of a Kafka instance.
ces_version	String	Cloud Eye version.
public_access_enabled	String	Time when public access was enabled for an instance. The value can be <b>true</b> , <b>activated</b> , <b>closed</b> , or <b>false</b> .
node_num	Integer	Node quantity.
enable_acl	Boolean	Indicates whether access control is enabled.
new_spec_billing_enable	Boolean	Whether billing based on new specifications is enabled.
broker_num	Integer	Broker quantity.
tags	Array of <b>TagEntity</b> objects	Tag list.
dr_enable	Boolean	Indicates whether DR is enabled.

**Table 5-12** TagEntity

Parameter	Type	Description
key	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: <code>=*&lt;&gt;, /</code>

Parameter	Type	Description
value	String	Tag value, which can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /

## Example Requests

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

## Example Responses

None

## Status Codes

Status Code	Description
200	The instance is 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.

### URI

```
DELETE /v2/{project_id}/instances/{instance_id}
```

**Table 5-13** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

None

## Response Parameters

None

## Example Requests

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

## Example Responses

None

## Status Codes

Status Code	Description
204	The specified instance is 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.

## URI

```
PUT /v2/{project_id}/instances/{instance_id}
```

**Table 5-14** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-15** Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Instance name. An instance name starts with a letter, consists of 4 to 64 characters, and can contain only letters, digits, underscores (_), and hyphens (-).
description	No	String	Instance description. The description can contain a maximum of 1024 characters. <b>NOTE</b> 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 \".
maintain_begin	No	String	Time at which the maintenance time window starts. The format is HH:mm:ss. <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window.</li> <li>The start time must be set to 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00.</li> <li>The start time and end time must be set in pairs. If the start time is left blank, the end time must also be left blank. In this case, the system automatically sets the start time to 02:00:00.</li> </ul>

Parameter	Mandatory	Type	Description
maintain_end	No	String	Time at which the maintenance time window ends. The format is HH:mm:ss. <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window.</li> <li>The end time is four hours later than the start time. For example, if the start time is 22:00:00, the end time is 02:00:00.</li> <li>The start time and end time must be set in pairs. If the end time is left blank, the start time is also left blank. In this case, the system automatically sets the end time to 06:00:00.</li> </ul>
security_group_id	No	String	Security group ID.
retention_policy	No	String	Capacity threshold policy. Options: <ul style="list-style-type: none"> <li><b>produce_reject</b>: New messages cannot be created.</li> <li><b>time_base</b>: The earliest messages are deleted.</li> </ul>
enterprise_project_id	No	String	Enterprise project.

## Response Parameters

None

## Example Requests

- Modifying the name and description of an instance.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}
{
  "name": "kafka001",
  "description": "kafka description"
}
```



- Modifying the name, description, and maintenance time window of an instance.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}
{
  "name": "dms002",
  "description": "instance description",
  "maintain_begin": "02:00:00",
  "maintain_end": "06:00:00"
}
```

- Changing the capacity threshold policy.

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

## Example Responses

None

## Status Codes

Status Code	Description
204	The instance information is modified successfully.

## Error Codes

See [Error Codes](#).

## 5.1.6 Batch Restarting or Deleting Instances

### Function

This API is used to restart or delete instances in batches.

When an instance is being restarted, message retrieval and creation requests of the client will be rejected.

Deleting an instance will delete the data in the instance without any backup. Exercise caution when performing this operation.

### URI

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

**Table 5-16** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

## 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. The value can be <b>restart</b> or <b>delete</b> .
all_failure	No	String	Value <b>kafka</b> indicates all Kafka instances that fail to be created are to be deleted.

## Response Parameters

Status code: 200

**Table 5-18** Response body parameters

Parameter	Type	Description
results	Array of <b>results</b> objects	Result of instance modification.

**Table 5-19** results

Parameter	Type	Description
result	String	Operation result. <ul style="list-style-type: none"> <li>● <b>success</b>: The operation succeeded.</li> <li>● <b>failed</b>: The operation failed.</li> </ul>
instance	String	Instance ID.

## Example Requests

- Restarting instances in batches.

```
POST https://{endpoint}/v2/{project_id}/instances/action
{
  "action": "restart",
  "instances": [ "54602a9d-5e22-4239-9123-77e350df4a34", "7166cdea-
dbad-4d79-9610-7163e6f8b640" ]
}
```

- Deleting instances in batches.

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

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

- Deleting all instances that fail to be created.

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

```
{
  "action": "delete",
  "allFailure": "kafka"
}
```

## Example Responses

**Status code: 200**

The instances are restarted or deleted successfully.

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

## Status Codes

Status Code	Description
200	The instances are restarted or deleted successfully.

## Error Codes

See [Error Codes](#).

# 5.2 Instance Management

## 5.2.1 Resetting the Password

### Function

This API is used to reset the password.

### URI

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

**Table 5-20** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-21** Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	The password can contain 8 to 32 characters, and must contain at least three types of the following characters: <ul style="list-style-type: none"> <li>• Uppercase letters</li> <li>• Lowercase letters</li> <li>• Digits</li> <li>• Special characters `~!@#\$%^&amp;*()-_+=\ [{]};:'''&lt;,.&gt;/?` and spaces, and cannot start with a hyphen (-).</li> </ul>

## Response Parameters

None

## Example Requests

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/password
{
  "new_password" : "*****"
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The password is reset successfully.

## Error Codes

See [Error Codes](#).

## 5.2.2 Resetting Kafka Manager Password

### Function

This API is used to reset the Kafka Manager password.

### URI

PUT /v2/{project\_id}/instances/{instance\_id}/kafka-manager-password

**Table 5-22** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

**Table 5-23** Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	The password can contain 8 to 32 characters, and must contain at least three types of the following characters: <ul style="list-style-type: none"> <li>• Uppercase letters</li> <li>• Lowercase letters</li> <li>• Digits</li> <li>• Special characters `~!@#\$%^&amp;*()-_+=\ []{};:'"''&lt;&gt;/?` and spaces, and cannot start with a hyphen (-).</li> </ul>

### Response Parameters

None

### Example Requests

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/kafka-manager-password
{
```

```
"new_password" : "*****"  
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The password is reset successfully.

## Error Codes

See [Error Codes](#).

## 5.2.3 Restarting Kafka Manager

### Function

This API is used to restart Kafka Manager.

### URI

PUT /v2/{project\_id}/instances/{instance\_id}/restart-kafka-manager

**Table 5-24** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-25** Response body parameters

Parameter	Type	Description
result	String	Execution result.

Parameter	Type	Description
instance_id	String	Instance ID.

## Example Requests

Restarting Kafka Manager.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/restart-kafka-manager
```

## Example Responses

**Status code: 200**

Kafka Manager is restarted successfully.

```
{
  "result" : "success",
  "instance_id" : "605cd78c-92dc-4335-8bae-43677f31fd6c"
}
```

## Status Codes

Status Code	Description
200	Kafka Manager is restarted successfully.

## Error Codes

See [Error Codes](#).

## 5.2.4 Configuring Automatic Topic Creation

### Function

This API is used to enable or disable automatic topic creation.

### URI

```
POST /v2/{project_id}/instances/{instance_id}/autotopic
```

**Table 5-26** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-27** Request body parameters

Parameter	Mandatory	Type	Description
enable_auto_topic	Yes	Boolean	Whether to enable automatic topic creation.

## Response Parameters

None

## Example Requests

Enabling automatic topic creation.

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/autotopic
{
  "enable_auto_topic" : true
}
```

## Example Responses

None

## Status Codes

Status Code	Description
200	The function is enabled or disabled successfully.

## Error Codes

See [Error Codes](#).

## 5.2.5 Modifying the Private IP Address for Cross-VPC Access

### Function

This API is used to modify the private IP address for cross-VPC access.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/crossvpc/modify



**Table 5-28** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-29** Request body parameters

Parameter	Mandatory	Type	Description
advertised_ip_contents	Yes	Map<String,String>	<p>User-defined advertised_ip_contents key-value pair.</p> <p>The key is the listeners IP address.</p> <p>The value is the advertised.listeners IP address or domain name.</p> <p><b>NOTE</b> Fill in the items that are not modified during IP address change.</p>

## Response Parameters

Status code: 200

**Table 5-30** Response body parameters

Parameter	Type	Description
success	Boolean	Result of the cross-VPC access modification.
results	Array of <b>results</b> objects	Details of the result of the cross-VPC access modification.

**Table 5-31** results

Parameter	Type	Description
advertised_ip	String	advertised.listeners IP address or domain name.

Parameter	Type	Description
success	Boolean	Status of the cross-VPC access modification.
ip	String	Listeners IP address.

## Example Requests

Modifying the private IP address for cross-VPC access.

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/crossvpc/modify
{
  "advertised_ip_contents": {
    "192.168.245.246": "192.168.245.247",
    "192.168.197.36": "192.168.197.38",
    "192.168.190.11": "192.168.190.11"
  }
}
```

## Example Responses

**Status code: 200**

The private IP address for cross-VPC access is modified successfully.

```
{
  "success": true,
  "results": [ {
    "advertised_ip": "192.168.197.36",
    "success": true,
    "ip": "192.168.197.36"
  }, {
    "advertised_ip": "192.168.190.11",
    "success": true,
    "ip": "192.168.190.11"
  }, {
    "advertised_ip": "192.168.245.255",
    "success": true,
    "ip": "192.168.245.246"
  } ]
}
```

## Status Codes

Status Code	Description
200	The private IP address for cross-VPC access is modified successfully.

## Error Codes

See [Error Codes](#).

## 5.2.6 Querying Kafka Cluster Metadata

### Function

This API is used to query Kafka cluster metadata.

### URI

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

**Table 5-32** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-33** Response body parameters

Parameter	Type	Description
cluster	<b>cluster</b> object	Cluster basic information.

**Table 5-34** cluster

Parameter	Type	Description
controller	String	Controller ID.
brokers	Array of <b>brokers</b> objects	Broker list.
topics_count	Integer	Number of topics.
partitions_count	Integer	Number of partitions.
online_partitions_count	Integer	Number of online partitions.
replicas_count	Integer	Number of replicas.

Parameter	Type	Description
isr_replicas_count	Integer	Total number of in-sync replicas (ISRs).
consumers_count	Integer	Number of consumer groups.

**Table 5-35** brokers

Parameter	Type	Description
host	String	Broker IP address.
port	Integer	Port number.
broker_id	String	Broker ID.
is_controller	Boolean	Whether the broker is a controller.
version	String	Server version.
register_time	Long	Broker registration time, which is a Unix timestamp.
is_health	Boolean	Whether Kafka brokers can be connected.

## Example Requests

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

## Example Responses

**Status code: 200**

Kafka cluster metadata is queried successfully.

```
{
  "cluster": {
    "controller": "2",
    "brokers": [ {
      "host": "192.168.0.159",
      "port": 9093,
      "broker_id": "0",
      "is_controller": false,
      "version": "1.1.0",
      "register_time": 1588754647872,
      "is_health": true
    }, {
      "host": "192.168.0.48",
      "port": 9093,
      "broker_id": "1",
      "is_controller": false,
      "version": "1.1.0",
      "register_time": 1588754647653,
      "is_health": true
    }, {
      "host": "192.168.0.212",
```

```

"port" : 9093,
"broker_id" : "2",
"is_controller" : true,
"version" : "1.1.0",
"register_time" : 1588754647284,
"is_health" : true
}],
"topics_count" : 3,
"partitions_count" : 9,
"online_partitions_count" : 9,
"replicas_count" : 27,
"isr_replicas_count" : 27,
"consumers_count" : 0
}
}

```

## Status Codes

Status Code	Description
200	Kafka cluster metadata is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.2.7 Querying Consumer Group Details

### Function

This API is used to query consumer group details.

### URI

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

**Table 5-36** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
group	Yes	String	Consumer group name.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-37** Response body parameters

Parameter	Type	Description
group	<b>group</b> object	Consumer group information.

**Table 5-38** group

Parameter	Type	Description
group_id	String	Consumer group name.
state	String	Consumer group status. The value can be: <ul style="list-style-type: none"> <li>• <b>Dead</b>: The consumer group has no members and no metadata.</li> <li>• <b>Empty</b>: The consumer group has metadata but has no members.</li> <li>• <b>PreparingRebalance</b>: The consumer group is to be rebalanced.</li> <li>• <b>CompletingRebalance</b>: All members have joined the group.</li> <li>• <b>Stable</b>: Members in the consumer group can consume messages normally.</li> </ul>
coordinator_id	Integer	Coordinator ID.
members	Array of <b>members</b> objects	Consumer list.
group_message_offsets	Array of <b>group_message_offsets</b> objects	Consumer offset.
assignment_strategy	String	Partition assignment policy.

**Table 5-39** members

Parameter	Type	Description
host	String	Consumer address.
assignment	Array of <b>assignment</b> objects	Details about the partition assigned to the consumer.
member_id	String	Consumer ID.
client_id	String	Client ID.

**Table 5-40** assignment

Parameter	Type	Description
topic	String	Topic name.
partitions	Array of integers	Partition list.

**Table 5-41** group\_message\_offsets

Parameter	Type	Description
partition	Integer	Partition number.
lag	Integer	Number of remaining messages that can be retrieved, that is, the number of accumulated messages.
topic	String	Topic name.
message_current_offset	Integer	Consumer offset.
message_log_end_offset	Integer	Log end offset (LEO).

## Example Requests

GET [https://{endpoint}/v2/{project\\_id}/instances/{instance\\_id}/management/groups/{group}](https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/groups/{group})

## Example Responses

**Status code: 200**

The consumer group details are queried successfully.

```
{
  "group": {
    "members": [ {
      "host": "/172.31.1.102",
      "assignment": [ {
        "topic": "test",
        "partitions": [ 0, 1, 2 ]
      } ],
      "member_id": "consumer-1-6b8ee551-d499-47d4-9beb-ba1527496785",
      "client_id": "consumer-1"
    } ],
    "state": "STABLE",
    "group_id": "test-consumer-group",
    "coordinator_id": 2,
    "group_message_offsets": [ {
      "partition": 0,
      "lag": 31396,
      "topic": "test",
```

```

"message_current_offset" : 935,
"message_log_end_offset" : 32331
}, {
  "partition" : 0,
  "lag" : 0,
  "topic" : "aaaa",
  "message_current_offset" : 0,
  "message_log_end_offset " : 0
}, {
  "partition" : 1,
  "lag" : 31279,
  "topic" : "test",
  "message_current_offset" : 1058,
  "message_log_end_offset " : 32337
}, {
  "partition" : 1,
  "lag" : 0,
  "topic" : "aaaa",
  "message_current_offset" : 0,
  "message_log_end_offset" : 0
}, {
  "partition" : 2,
  "lag" : 31603,
  "topic" : "test",
  "message_current_offset" : 739,
  "message_log_end_offset" : 32342
}],
"assignment_strategy" : "range"
}

```

## Status Codes

Status Code	Description
200	The consumer group details are queried successfully.

## Error Codes

See [Error Codes](#).

## 5.2.8 Resetting Consumer Group Offset to the Specified Position

### Function

Kafka instances do not support resetting the consumer offset online. Before resetting, stop the client for which the offset is to be reset.> After a client is stopped, the server considers the client offline only after the time period specified in **ConsumerConfig.SESSION\_TIMEOUT\_MS\_CONFIG** (1000 ms by default).

### URI

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



**Table 5-42** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
group	Yes	String	Consumer group name.

## Request Parameters

**Table 5-43** Request body parameters

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic name.
partition	No	Integer	Partition number. The default value is <b>-1</b> , indicating that all partitions are reset.
message_offset	No	Integer	Resetting consumer group offset to the specified position. <ul style="list-style-type: none"><li>• If this position is earlier than the current earliest offset, the offset will be reset to the earliest offset.</li><li>• If this offset is later than the current largest offset, the offset will be reset to the latest offset.</li></ul> <b>Either message_offset or timestamp must be specified.</b>

Parameter	Mandatory	Type	Description
timestamp	No	Integer	<p>Specified time that the offset is to be reset to. The value is a Unix timestamp, in millisecond.</p> <ul style="list-style-type: none"> <li>If this time is earlier than the current earliest timestamp, the offset will be reset to the earliest timestamp.</li> <li>If this time is later than the current largest timestamp, the offset will be reset to the latest timestamp.</li> </ul> <p><b>Either message_offset or timestamp must be specified.</b></p>

## Response Parameters

None

## Example Requests

- Resetting consumer group offset to the specified position.

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/groups/{group}/reset-message-offset
```

```
{
  "topic" : "test",
  "partition" : 0,
  "message_offset" : 10
}
```

- Resetting consumer group offset to the specified time.

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/groups/{group}/reset-message-offset
```

```
{
  "topic" : "test",
  "partition" : 0,
  "timestamp" : 1571812144000
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The consumer group offset is successfully reset to the specified position.

## Error Codes

See [Error Codes](#).

## 5.2.9 Querying Coordinator Details of a Kafka Instance

### Function

This API is used to query coordinator details of a Kafka instance.

### URI

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

**Table 5-44** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-45** Response body parameters

Parameter	Type	Description
coordinators	Array of <a href="#">coordinators</a> objects	List of coordinators of all consumer groups.

**Table 5-46** coordinators

Parameter	Type	Description
group_id	String	Consumer group ID.
id	Integer	Broker ID of the coordinator.
host	String	Address of the coordinator.
port	Integer	Port number.

## Example Requests

GET https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/management/coordinators

## Example Responses

**Status code: 200**

Coordinator details of the Kafka instance are queried successfully.

```
{
  "coordinators": [ {
    "group_id": "XXXX",
    "id": 2,
    "host": "172.31.1.15",
    "port": 9091
  }, {
    "group_id": "XXXX",
    "id": 2,
    "host": "172.31.1.15",
    "port": 9092
  }, {
    "group_id": "XXXX",
    "id": 2,
    "host": "172.31.1.15",
    "port": 9092
  }
]
}
```

## Status Codes

Status Code	Description
200	Coordinator details of the Kafka instance are queried successfully.

## Error Codes

See [Error Codes](#).

## 5.2.10 Adding Partitions to a Topic for a Kafka Instance

### Function

This API is used to add partitions to a topic for a Kafka instance.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/management/topics/{topic}/partitions-reassignment

**Table 5-47** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name.

### Request Parameters

**Table 5-48** Request body parameters

Parameter	Mandatory	Type	Description
partition	No	Integer	Total number of partitions after the addition. The value must be larger than current number of partitions. Maximum value: .

### Response Parameters

None

### Example Requests

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/topics/{topic}/partitions-reassignment
{
  "partition" : 3
}
```

### Example Responses

None

## Status Codes

Status Code	Description
204	Partitions are added successfully.

## Error Codes

See [Error Codes](#).

## 5.2.11 Reassigning Replicas of a Topic for a Kafka Instance

### Function

This API is used to reassign replicas of a topic for a Kafka instance.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/management/topics/{topic}/replicas-reassignment

**Table 5-49** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name.

### Request Parameters

**Table 5-50** Request body parameters

Parameter	Mandatory	Type	Description
partitions	No	Array of <a href="#">partitions</a> objects	Assignment of replicas of the partition after the change.

**Table 5-51** partitions

Parameter	Mandatory	Type	Description
partition	No	Integer	Partition ID.

Parameter	Mandatory	Type	Description
replicas	No	Array of integers	ID of the broker where the replica is expected to reside. The first integer in the array represents the leader replica broker ID. All partitions must have the same number of replicas. The number of replicas cannot be larger than the number of brokers.

## Response Parameters

None

## Example Requests

POST https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/management/topics/{topic}/replicas-reassignment

```
{
  "partitions" : [ {
    "partition" : 1,
    "replicas" : [ 1, 2 ]
  }, {
    "partition" : 0,
    "replicas" : [ 0, 1 ]
  } ]
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The replicas are reassigned successfully.

## Error Codes

See [Error Codes](#).

## 5.2.12 Querying the Disk Usage Status of Topics

### Function

This API is used to query the broker disk usage of topics.

## URI

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

**Table 5-52** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

**Table 5-53** Query Parameters

Parameter	Mandatory	Type	Description
minSize	No	String	Querying partitions by the used disk space. Options: 1 KB, 1 MB and 1 GB. Default value: 1 GB.
top	No	String	Querying partitions by top disk usage.
percentage	No	String	Querying partitions by the percentage of the used disk space.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-54** Response body parameters

Parameter	Type	Description
broker_list	Array of <a href="#">DiskusageEntity</a> objects	Broker list.

**Table 5-55** DiskusageEntity

Parameter	Type	Description
broker_name	String	Broker name.



Parameter	Type	Description
data_disk_size	String	Disk capacity.
data_disk_use	String	Used disk space.
data_disk_free	String	Remaining disk space.
data_disk_use_percentage	String	Message label.
status	String	Message label.
topic_list	Array of <a href="#">DiskusageTopicEntity</a> objects	Disk usage list of the topics.

**Table 5-56** DiskusageTopicEntity

Parameter	Type	Description
size	String	Disk usage.
topic_name	String	Topic name.
topic_partition	String	Partition.
percentage	Double	Percentage of used disk space.

## Example Requests

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

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "broker_list": [ {
    "broker_name": "broker-0",
    "data_disk_size": "66G",
    "data_disk_use": "53M",
    "data_disk_free": "63G",
    "data_disk_use_percentage": "1",
    "status": "Success get info",
    "topic_list": [ {
      "size": "12K",
      "topic_name": "topic-test",
      "topic_partition": "2",
      "percentage": 1.7339533025568183E-5
    }, {
      "size": "12K",
      "topic_name": "__consumer_offsets",
```

```
"topic_partition" : "4",
"percentage" : 1.7339533025568183E-5
}, {
"size" : "12K",
"topic_name" : "__consumer_offsets",
"topic_partition" : "3",
"percentage" : 1.7339533025568183E-5
}, {
"size" : "8.0K",
"topic_name" : "__trace",
"topic_partition" : "6",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "__trace",
"topic_partition" : "4",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "__trace",
"topic_partition" : "2",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "__trace",
"topic_partition" : "0",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "topic-test",
"topic_partition" : "0",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "topic-1568537362",
"topic_partition" : "2",
"percentage" : 1.1559688683712121E-5
}, {
"size" : "8.0K",
"topic_name" : "__consumer_offsets",
"topic_partition" : "7",
"percentage" : 1.1559688683712121E-5
}
}
}]]
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.2.13 Querying All Consumer Groups

### Function

This API is used to query all consumer groups.

## URI

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

**Table 5-57** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

**Table 5-58** 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	Maximum number of consumer group IDs returned in the current query. The default value is <b>10</b> . The value ranges from 1 to 50.
group	No	String	Filter consumer group names that contain specific keywords.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-59** Response body parameters

Parameter	Type	Description
group_ids	Array of strings	All consumer group IDs.
total	Integer	Total number of consumer groups.
next_offset	Integer	Sequence number of the next consumer group.
previous_offset	Integer	Sequence number of the previous consumer group.

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups?
offset={offset}&limit={limit}&group={group}
```

## Example Responses

**Status code: 200**

All consumer groups are queried successfully.

```
{
  "group_ids" : [ "groupId_1", "groupId_2", "groupId_3" ],
  "total" : 5,
  "next_offset" : 4,
  "previous_offset" : 0
}
```

## Status Codes

Status Code	Description
200	All consumer groups are queried successfully.

## Error Codes

See [Error Codes](#).

## 5.2.14 Querying a Specific Consumer Group

### Function

This API is used to query a specific consumer group.

### URI

```
GET /v2/{project_id}/instances/{instance_id}/groups/{group}
```

**Table 5-60** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
group	Yes	String	Consumer group ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-61** Response body parameters

Parameter	Type	Description
group	<a href="#">group</a> object	Consumer group information.

**Table 5-62** group

Parameter	Type	Description
group_id	String	Consumer group name.
state	String	Consumer group status. The value can be: <ul style="list-style-type: none"> <li>• <b>Dead</b>: The consumer group has no members and no metadata.</li> <li>• <b>Empty</b>: The consumer group has metadata but has no members.</li> <li>• <b>PreparingRebalance</b>: The consumer group is to be rebalanced.</li> <li>• <b>CompletingRebalance</b>: All members have joined the group.</li> <li>• <b>Stable</b>: Members in the consumer group can consume messages normally.</li> </ul>
coordinator_id	Integer	Coordinator ID.
members	Array of <a href="#">members</a> objects	Consumer list.
group_message_offsets	Array of <a href="#">group_message_offsets</a> objects	Consumer offset.
assignment_strategy	String	Partition assignment policy.

**Table 5-63** members

Parameter	Type	Description
host	String	Consumer address.
member_id	String	Consumer ID.

Parameter	Type	Description
client_id	String	Client ID.

**Table 5-64** group\_message\_offsets

Parameter	Type	Description
partition	Integer	Partition number.
lag	Integer	Number of remaining messages that can be retrieved, that is, the number of accumulated messages.
topic	String	Topic name.
message_current_offset	Integer	Consumer offset.
message_log_end_offset	Integer	Log end offset (LEO).

## Example Requests

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

## Example Responses

### Status code: 200

A specific consumer group is queried successfully.

```
{
  "group": null,
  "members": [ {
    "host": "/172.31.1.102",
    "member_id": "consumer-1-6b8ee551-d499-47d4-9beb-ba1527496785",
    "client_id": "consumer-1"
  } ],
  "state": "STABLE",
  "group_id": "test-consumer-group",
  "coordinator_id": 2,
  "group_message_offsets": [ {
    "partition": 0,
    "lag": 31396,
    "topic": "test",
    "message_current_offset": 935,
    "message_log_end_offset": 32331
  }, {
    "partition": 0,
    "lag": 0,
    "topic": "aaaa",
    "message_current_offset": 0,
    "message_log_end_offset": 0
  }, {
    "partition": 1,
    "lag": 31279,
    "topic": "test",
    "message_current_offset": 1058,
```

```

"message_log_end_offset" : 32337
}, {
  "partition" : 1,
  "lag" : 0,
  "topic" : "aaaa",
  "message_current_offset" : 0,
  "message_log_end_offset" : 0
}, {
  "partition" : 2,
  "lag" : 31603,
  "topic" : "test",
  "message_current_offset" : 739,
  "message_log_end_offset" : 32342
}],
"assignment_strategy" : "range"
}

```

## Status Codes

Status Code	Description
200	A specific consumer group is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.2.15 Deleting a Consumer Group from a Kafka Instance

### Function

This API is used to delete a consumer group from a Kafka instance.

### URI

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

**Table 5-65** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
group	Yes	String	Consumer group ID.

### Request Parameters

None

## Response Parameters

None

## Example Requests

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

## Example Responses

None

## Status Codes

Status Code	Description
204	The deletion is successful.

## Error Codes

See [Error Codes](#).

## 5.2.16 Batch Deleting Consumer Groups of a Kafka Instance

### Function

This API is used to delete multiple consumer groups of a Kafka instance in batches.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/groups/batch-delete

**Table 5-66** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.



## Request Parameters

**Table 5-67** Request body parameters

Parameter	Mandatory	Type	Description
[items]	Yes	Array of strings	List of consumer groups to be deleted.

## Response Parameters

**Status code: 200**

**Table 5-68** Response body parameters

Parameter	Type	Description
failed_groups	Array of <a href="#">failed_groups</a> objects	List of consumer groups that failed to be deleted.
total	Integer	Number of records that fail to be deleted.

**Table 5-69** failed\_groups

Parameter	Type	Description
group_id	String	ID of consumer groups that failed to be deleted.
error_message	String	Cause of the deletion failure.

## Example Requests

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/groups/batch-delete
[ "group1", "group2" ]
```

## Example Responses

**Status code: 200**

The consumer groups are deleted successfully.

```
{
  "failed_groups": [ {
    "group_id": "test-1",
    "error_message": "UNKNOWN"
  }, {
    "group_id": "test-2",
    "error_message": "UNKNOWN"
  }
]
```

```
}],  
"total" : 2  
}
```

## Status Codes

Status Code	Description
200	The consumer groups are deleted successfully.

## Error Codes

See [Error Codes](#).

# 5.3 Specification Modification Management

## 5.3.1 Querying Product Information for Instance Specification Modification

### Function

This API is used to query the product information for instance specification modification.

### URI

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

**Table 5-70** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

**Table 5-71** Query Parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Product edition. <ul style="list-style-type: none"> <li>• <b>advanced</b>: the premium edition</li> <li>• <b>platinum</b>: the platinum edition</li> <li>• <b>dec</b>: the dedicated cloud edition</li> <li>• <b>exp</b>: the experience edition</li> </ul>
engine	Yes	String	Message engine. Currently supported: <b>kafka</b> .

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-72** Response body parameters

Parameter	Type	Description
hourly	Array of <b>hourly</b> objects	List of products.
monthly	Array of <b>monthly</b> objects	List of products in yearly/monthly billing mode. Currently, you cannot create yearly/monthly Kafka instances by calling APIs.

**Table 5-73** hourly

Parameter	Type	Description
name	String	Message engine, which is <b>kafka</b> .
version	String	Version of the message engine. Currently, only 1.1.0 and 2.3.0 is supported.
values	Array of <b>values</b> objects	Product specifications.

**Table 5-74** values

Parameter	Type	Description
detail	Array of <b>detail</b> objects	Specification details.
name	String	Instance type.
unavailable_zones	Array of strings	AZs where resources are sold out.
available_zones	Array of strings	List of AZs where there are available resources.

**Table 5-75** detail

Parameter	Type	Description
tps	String	Maximum number of messages per unit time.
storage	String	Message storage space.
partition_num	String	Number of partitions in a Kafka instance.
product_id	String	Product ID.
spec_code	String	Specification ID.
io	Array of <b>io</b> objects	I/O information.
bandwidth	String	Bandwidth of a Kafka instance.
unavailable_zones	Array of strings	AZs where resources are sold out.
available_zones	Array of strings	List of AZs where there are available resources.
ecs_flavor_id	String	Flavor of the corresponding ECS.
arch_type	String	Instance architecture type. Currently, only x86 is supported.

**Table 5-76** io

Parameter	Type	Description
io_type	String	I/O type.
storage_spec_code	String	I/O specifications.

Parameter	Type	Description
available_zones	Array of strings	List of AZs where there are available I/O resources.
unavailable_zones	Array of strings	List of AZs where I/O resources are sold out.
volume_type	String	Disk type.

**Table 5-77** monthly

Parameter	Type	Description
name	String	Message engine, which is <b>kafka</b> .
version	String	Version of the message engine. Currently, only 1.1.0 and 2.3.0 is supported.
values	Array of <b>values</b> objects	Product specifications.

**Table 5-78** values

Parameter	Type	Description
detail	Array of <b>detail</b> objects	Specification details.
name	String	Instance type.
unavailable_zones	Array of strings	AZs where resources are sold out.
available_zones	Array of strings	List of AZs where there are available resources.

**Table 5-79** detail

Parameter	Type	Description
tps	String	Maximum number of messages per unit time.
storage	String	Message storage space.
partition_num	String	Number of partitions in a Kafka instance.
product_id	String	Product ID.
spec_code	String	Specification ID.

Parameter	Type	Description
io	Array of <b>io</b> objects	I/O information.
bandwidth	String	Bandwidth of a Kafka instance.
unavailable_zones	Array of strings	AZs where resources are sold out.
available_zones	Array of strings	List of AZs where there are available resources.
ecs_flavor_id	String	Flavor of the corresponding ECS.
arch_type	String	Instance architecture type. Currently, only x86 is supported.

**Table 5-80** io

Parameter	Type	Description
io_type	String	I/O type.
storage_spec_code	String	I/O specifications.
available_zones	Array of strings	List of AZs where there are available I/O resources.
unavailable_zones	Array of strings	List of AZs where I/O resources are sold out.
volume_type	String	Disk type.

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/extend?type={type}&engine={engine}
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "Hourly": [ {
    "name": "kafka",
    "version": "1.1.0",
    "values": [ {
      "detail": [ {
        "tps": "50000",
        "storage": "200",
        "partition_num": "300",
        "product_id": "00300-30316-0--0",
        "spec_code": "kafka.c3.mini.connector",

```

```

"io" : [ {
  "io_type" : "high",
  "storage_spec_code" : "dms.physical.storage.high",
  "available_zones" : [ "xxx", "xxx" ],
  "volume_type" : "SAS"
}, {
  "io_type" : "ultra",
  "storage_spec_code" : "dms.physical.storage.ultra",
  "available_zones" : [ "xxx", "xxx" ],
  "volume_type" : "SSD"
} ],
"bandwidth" : "100MB",
"unavailable_zones" : [ "xxx", "xxx" ],
"available_zones" : [ "xxx", "xxx" ],
"ecs_flavor_id" : "c6.large.2",
"arch_type" : "X86"
}, {
  "tps" : "100000",
  "storage" : "396",
  "partition_num" : "900",
  "product_id" : "00300-30340-0--0",
  "spec_code" : "kafka.c3.small.2.connector",
  "io" : [ {
    "io_type" : "high",
    "storage_spec_code" : "dms.physical.storage.high",
    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SAS"
  }, {
    "io_type" : "ultra",
    "storage_spec_code" : "dms.physical.storage.ultra",
    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SSD"
  } ],
  "bandwidth" : "300MB",
  "unavailable_zones" : [ "xxx", "xxx" ],
  "available_zones" : [ "xxx", "xxx" ],
  "ecs_flavor_id" : "c6.xlarge.2",
  "arch_type" : "X86"
}, {
  "tps" : "200000",
  "storage" : "1056",
  "partition_num" : "1800",
  "product_id" : "00300-30342-0--0",
  "spec_code" : "kafka.c3.middle.2.connector",
  "io" : [ {
    "io_type" : "high",
    "storage_spec_code" : "dms.physical.storage.high",
    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SAS"
  }, {
    "io_type" : "ultra",
    "storage_spec_code" : "dms.physical.storage.ultra",
    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SSD"
  } ],
  "bandwidth" : "600MB",
  "unavailable_zones" : [ "xxx", "xxx" ],
  "available_zones" : [ "xxx", "xxx" ],
  "ecs_flavor_id" : "c6.2xlarge.2",
  "arch_type" : "X86"
}, {
  "tps" : "300000",
  "storage" : "2112",
  "partition_num" : "1800",
  "product_id" : "00300-30344-0--0",
  "spec_code" : "kafka.c3.high.2.connector",
  "io" : [ {
    "io_type" : "high",
    "storage_spec_code" : "dms.physical.storage.high",

```

```

    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SAS"
  }, {
    "io_type" : "ultra",
    "storage_spec_code" : "dms.physical.storage.ultra",
    "available_zones" : [ "xxx", "xxx" ],
    "volume_type" : "SSD"
  } ],
  "bandwidth" : "1200MB",
  "unavailable_zones" : [ "xxx", "xxx" ],
  "available_zones" : [ "xxx", "xxx" ],
  "ecs_flavor_id" : "c6.2xlarge.2",
  "arch_type" : "X86"
}],
"name" : "cluster",
"unavailable_zones" : [ "xxx", "xxx" ],
"available_zones" : [ "xxx", "xxx" ]
} ]
}],
"Monthly" : [ {
  "name" : "kafka",
  "version" : "1.1.0",
  "values" : [ {
    "detail" : [ {
      "tps" : "50000",
      "storage" : "200",
      "partition_num" : "300",
      "product_id" : "00300-30317-0--0",
      "spec_code" : "kafka.c3.mini.connector",
      "io" : [ {
        "io_type" : "high",
        "storage_spec_code" : "dms.physical.storage.high",
        "available_zones" : [ "xxx", "xxx" ],
        "volume_type" : "SAS"
      }, {
        "io_type" : "ultra",
        "storage_spec_code" : "dms.physical.storage.ultra",
        "available_zones" : [ "xxx", "xxx" ],
        "volume_type" : "SSD"
      } ],
      "bandwidth" : "100MB",
      "unavailable_zones" : [ "xxx", "xxx" ],
      "available_zones" : [ "xxx", "xxx" ],
      "ecs_flavor_id" : "c6.large.2",
      "arch_type" : "X86"
    }, {
      "tps" : "100000",
      "storage" : "396",
      "partition_num" : "900",
      "product_id" : "00300-30341-0--0",
      "spec_code" : "kafka.c3.small.2.connector",
      "io" : [ {
        "io_type" : "high",
        "storage_spec_code" : "dms.physical.storage.high",
        "available_zones" : [ "xxx", "xxx" ],
        "volume_type" : "SAS"
      }, {
        "io_type" : "ultra",
        "storage_spec_code" : "dms.physical.storage.ultra",
        "available_zones" : [ "xxx", "xxx" ],
        "volume_type" : "SSD"
      } ],
      "bandwidth" : "300MB",
      "unavailable_zones" : [ "xxx", "xxx" ],
      "available_zones" : [ "xxx", "xxx" ],
      "ecs_flavor_id" : "c6.xlarge.2",
      "arch_type" : "X86"
    }, {
      "tps" : "200000",

```



```

"storage": "1056",
"partition_num": "1800",
"product_id": "00300-30343-0--0",
"spec_code": "kafka.c3.middle.2.connector",
"io": [ {
  "io_type": "high",
  "storage_spec_code": "dms.physical.storage.high",
  "available_zones": [ "xxx", "xxx" ],
  "volume_type": "SAS"
}, {
  "io_type": "ultra",
  "storage_spec_code": "dms.physical.storage.ultra",
  "available_zones": [ "xxx", "xxx" ],
  "volume_type": "SSD"
}],
"bandwidth": "600MB",
"unavailable_zones": [ "xxx", "xxx" ],
"available_zones": [ "xxx", "xxx" ],
"ecs_flavor_id": "c6.2xlarge.2",
"arch_type": "X86"
}, {
  "tps": "300000",
  "storage": "2112",
  "partition_num": "1800",
  "product_id": "00300-30345-0--0",
  "spec_code": "kafka.c3.high.2.connector",
  "io": [ {
    "io_type": "high",
    "storage_spec_code": "dms.physical.storage.high",
    "available_zones": [ "xxx", "xxx" ],
    "volume_type": "SAS"
  }, {
    "io_type": "ultra",
    "storage_spec_code": "dms.physical.storage.ultra",
    "available_zones": [ "xxx", "xxx" ],
    "volume_type": "SSD"
  } ],
  "bandwidth": "1200MB",
  "unavailable_zones": [ "xxx", "xxx" ],
  "available_zones": [ "xxx", "xxx" ],
  "ecs_flavor_id": "c6.2xlarge.2",
  "arch_type": "X86"
}],
"name": "cluster",
"unavailable_zones": [ "xxx", "xxx" ],
"available_zones": [ "xxx", "xxx" ]
} ]
} ]
}

```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.3.2 Modifying Instance Specifications

### Function

This API is used to modify instance specifications.

### URI

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

**Table 5-81** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

### Request Parameters

**Table 5-82** Request body parameters

Parameter	Mandatory	Type	Description
new_spec_code	No	String	Specification ID after the change.If only the disk size is expanded, the specification ID remains unchanged.
new_storage_space	No	Integer	Message storage space in GB after the change.If the bandwidth is expanded, <b>new_storage_space</b> cannot be smaller than the minimum disk size specified by the bandwidth.
oper_type	No	String	Specification modification type.The new specifications support the following types: <b>horizontal</b> , <b>vertical</b> , <b>node</b> , and <b>storage</b> .
new_broker_num	No	Integer	Number of cluster nodes after the specifications are changed.
new_product_id	No	String	Product ID after the specifications are changed.This parameter must be specified for <b>vertical</b> expansion (scale-up).

## Response Parameters

Status code: 200

Table 5-83 Response body parameters

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

## Example Requests

Pay-per-use instance (old specifications)

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/extend
{
  "new_spec_code" : "dms.instance.kafka.cluster.c3.mini",
  "new_storage_space" : 1000
}
```

## Example Responses

Status code: 200

Instance specifications are modified successfully.

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

## Status Codes

Status Code	Description
200	Instance specifications are modified successfully.

## Error Codes

See [Error Codes](#).

# 5.4 Topic Management

## 5.4.1 Creating a Topic for a Kafka Instance

### Function

This API is used to create a topic for a Kafka instance.

## URI

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

**Table 5-84** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-85** Request body parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Topic name, which consists of 4 to 64 characters, starts with a letter, and contains only letters, hyphens (-), underscores (_), and digits.
replication	No	Integer	Number of replicas, which is configured to ensure data reliability. Value range: 1 to 3.
sync_message_flush	No	Boolean	Whether synchronous flushing is enabled. The default value is <b>false</b> . Synchronous flushing compromises performance.
partition	No	Integer	Number of topic partitions, which is used to set the number of concurrently consumed messages. Value range: .
sync_replication	No	Boolean	Whether synchronous replication is enabled. After this function is enabled, the <b>acks</b> parameter on the producer client must be set to <b>-1</b> . Otherwise, this parameter does not take effect.
retention_time	No	Integer	Message retention period. The default value is <b>72</b> . Value range: 1-168. Unit: hour.

## Response Parameters

Status code: 200

Table 5-86 Response body parameters

Parameter	Type	Description
name	String	Topic name.

## Example Requests

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics
{
  "id" : "kafka01"
}
```

## Example Responses

Status code: 200

The creation is successful.

```
{
  "name" : "kafka01"
}
```

## Status Codes

Status Code	Description
200	The creation is successful.

## Error Codes

See [Error Codes](#).

## 5.4.2 Listing Topics of a Kafka Instance

### Function

This API is used to query details about topics of a Kafka instance.

### URI

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

**Table 5-87** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-88** Response body parameters

Parameter	Type	Description
total	Integer	Total number of topics.
size	Integer	Maximum number of records to be displayed on a page.
remain_partitions	Integer	Number of remaining partitions.
max_partitions	Integer	Total number of partitions.
topics	Array of <a href="#">TopicEntity</a> objects	Topic list.

**Table 5-89** TopicEntity

Parameter	Type	Description
policiesOnly	Boolean	Whether this policy is the default policy.
name	String	Topic name.
replication	Integer	Number of replicas, which is configured to ensure data reliability.
partition	Integer	Number of topic partitions, which is used to set the number of concurrently consumed messages.
retention_time	Integer	Retention period of a message.

Parameter	Type	Description
sync_replication	Boolean	Whether synchronous replication is enabled. After this function is enabled, the <b>acks</b> parameter on the producer client must be set to <b>-1</b> . Otherwise, this parameter does not take effect.
sync_message_flush	Boolean	Whether synchronous flushing is enabled. The default value is <b>false</b> . Synchronous flushing compromises performance.
external_configs	Object	Extended configuration.
topic_type	Integer	Topic type. Options: <b>0</b> : common topic; <b>1</b> : system (internal) topic.

## Example Requests

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

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "total" : 3,
  "size" : 3,
  "topics" : [ {
    "policiesOnly" : false,
    "name" : "topic-11",
    "replication" : 3,
    "partition" : 3,
    "retention_time" : 72,
    "sync_replication" : false,
    "sync_message_flush" : false,
    "external_configs" : { },
    "topic_type" : 0
  }, {
    "policiesOnly" : false,
    "name" : "topic-2077405901",
    "replication" : 3,
    "partition" : 3,
    "retention_time" : 72,
    "sync_replication" : false,
    "sync_message_flush" : true,
    "external_configs" : { },
    "topic_type" : 0
  }, {
    "policiesOnly" : false,
    "name" : "topic-test",
    "replication" : 3,
    "partition" : 3,
    "retention_time" : 1,
    "sync_replication" : true,
    "sync_message_flush" : false,
    "external_configs" : { },
    "topic_type" : 0
  }
]
```

```
}]
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.4.3 Modifying Topics of a Kafka Instance

### Function

This API is used to modify topics of a Kafka instance.

### URI

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

**Table 5-90** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-91** Request body parameters

Parameter	Mandatory	Type	Description
topics	No	Array of <a href="#">topics</a> objects	Topics that were modified.

**Table 5-92** topics

Parameter	Mandatory	Type	Description
id	Yes	String	Topic name, which cannot be modified.



Parameter	Mandatory	Type	Description
retention_time	No	Integer	Aging time in hour.
sync_replication	No	Boolean	Whether synchronous replication is enabled.
sync_message_flush	No	Boolean	Whether synchronous flushing is enabled.
new_partition_numbers	No	Integer	Number of the partitions.

## Response Parameters

None

## Example Requests

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/topics
{
  "topics": [ {
    "id": "topic-1284340884",
    "retention_time": 70,
    "sync_replication": false,
    "sync_message_flush": false,
    "new_partition_numbers": 6
  } ]
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The modification is successful.

## Error Codes

See [Error Codes](#).

## 5.4.4 Batch Deleting Topics of a Kafka Instance

### Function

This API is used to delete multiple topics of a Kafka instance in batches. If some consumer groups are deleted successfully while some fail to be deleted, a success

response is returned with information about consumer groups that fail to be deleted.

## URI

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

**Table 5-93** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-94** Request body parameters

Parameter	Mandatory	Type	Description
topics	No	Array of strings	List of topics to delete.

## Response Parameters

**Status code: 200**

**Table 5-95** Response body parameters

Parameter	Type	Description
topics	Array of <b>topics</b> objects	Topic list.

**Table 5-96** topics

Parameter	Type	Description
id	String	Topic name.
success	Boolean	Whether the topics are deleted.

## Example Requests

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

```
"topics" : [ "topic01" ]  
}
```

## Example Responses

**Status code: 200**

The deletion is successful.

```
{  
  "topics" : [ {  
    "id" : "haha",  
    "success" : true  
  }, {  
    "id" : "aabb",  
    "success" : true  
  } ]  
}
```

## Status Codes

Status Code	Description
200	The deletion is successful.

## Error Codes

See [Error Codes](#).

## 5.4.5 Querying Topic Details

### Function

This API is used to query topic details of a Kafka instance.

### URI

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

**Table 5-97** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-98** Response body parameters

Parameter	Type	Description
topic	String	Topic name.
partitions	Array of <a href="#">partitions</a> objects	Partition list.
group_subscribed	Array of strings	List of consumer groups that subscribe to the topic.

**Table 5-99** partitions

Parameter	Type	Description
partition	Integer	Partition ID.
leader	Integer	ID of the broker where the leader replica resides.
leo	Integer	LEO of the partition leader replica.
hw	Integer	High watermark (HW) of the partition.
lso	Integer	Log start offset (LSO) of the partition leader replica.
last_update_timestamp	Long	Time when the last message was written to the partition. The value is a Unix timestamp. Unit: ms
replicas	Array of <a href="#">replicas</a> objects	Replica list.

**Table 5-100** replicas

Parameter	Type	Description
broker	Integer	ID of the broker where the replica resides.
leader	Boolean	Whether the replica is the leader.
in_sync	Boolean	Whether the replica is in the ISR.

Parameter	Type	Description
size	Integer	Current log size of the replica. Unit: byte.
lag	Integer	Number of messages that lag behind the high watermark in the replica.

## Example Requests

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

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "topic": "test",
  "partitions": [ {
    "partition": 0,
    "leader": 2,
    "replicas": [ {
      "broker": 2,
      "leader": true,
      "in_sync": true,
      "size": 123971146,
      "lag": 0
    }, {
      "broker": 1,
      "leader": false,
      "in_sync": true,
      "size": 123971146,
      "lag": 0
    }, {
      "broker": 0,
      "leader": false,
      "in_sync": true,
      "size": 123971146,
      "lag": 0
    } ],
    "iso": 0,
    "leo": 13598,
    "hw": 13598,
    "last_update_timestamp": 1571477180985
  }, {
    "partition": 2,
    "leader": 1,
    "replicas": [ {
      "broker": 1,
      "leader": true,
      "in_sync": true,
      "size": 123889531,
      "lag": 0
    }, {
      "broker": 0,
      "leader": false,
      "in_sync": true,
      "size": 123889531,
      "lag": 0
    }, {
      "broker": 2,
      "leader": false,
      "in_sync": true,

```

```

    "size" : 123889531,
    "lag" : 0
  } ],
  "lso" : 0,
  "leo" : 13601,
  "hw" : 13601,
  "last_update_timestamp" : 1571477077146
}, {
  "partition" : 1,
  "leader" : 0,
  "replicas" : [ {
    "broker" : 0,
    "leader" : true,
    "in_sync" : true,
    "size" : 127245604,
    "lag" : 0
  }, {
    "broker" : 2,
    "leader" : false,
    "in_sync" : true,
    "size" : 127245604,
    "lag" : 0
  }, {
    "broker" : 1,
    "leader" : false,
    "in_sync" : true,
    "size" : 127245604,
    "lag" : 0
  } ],
  "lso" : 0,
  "leo" : 13599,
  "hw" : 13599,
  "last_update_timestamp" : 1571477172959
}],
"group_subscribed" : [ "test-consumer-group" ]
}

```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

# 5.5 User Management

## 5.5.1 Querying the User List

### Function

This API is used to query the user list.

User management is supported only when SASL is enabled for the Kafka instance.

## URI

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

**Table 5-101** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-102** Response body parameters

Parameter	Type	Description
users	Array of <a href="#">ShowInstanceUsersEntity</a> objects	User list.

**Table 5-103** ShowInstanceUsersEntity

Parameter	Type	Description
user_name	String	Username.
role	String	User role.
default_app	Boolean	Whether an application is the default application.
created_time	Long	Creation time.

## Example Requests

Querying the user list.

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

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "users": [ {
    "user_name": "xxxa",
    "role": "guest",
    "default_app": false,
    "created_time": 1615431764734
  }, {
    "user_name": "test",
    "role": "guest",
    "default_app": false,
    "created_time": 1615364062463
  }, {
    "user_name": "ROOT",
    "role": "guest",
    "default_app": false,
    "created_time": 1617194246328
  } ]
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.5.2 Creating a User

### Function

This API is used to create a user for a Kafka instance for which SASL is enabled.

### URI

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

**Table 5-104** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.



## Request Parameters

**Table 5-105** Request body parameters

Parameter	Mandatory	Type	Description
user_name	No	String	Username.
user_passwd	No	String	User password. The password must be different from the username. The password must meet the following complexity requirements: <ul style="list-style-type: none"> <li>• Contains 8 to 32 characters.</li> <li>• Contains at least two of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#\$%^&amp;*()-_+=  [{}]:'""',&lt;&gt;/?</li> </ul> </li> </ul>

## Response Parameters

**Status code: 400**

**Table 5-106** Response body parameters

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

**Status code: 403**

**Table 5-107** Response body parameters

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

## Example Requests

Creating a user.

```
POST https://{endpoint}/v2/{project_id}/instances/{instance_id}/users
{
  "user_name" : "test",
  "user_passwd" : "Cloud@123"
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The creation is successful.
400	Invalid parameters.
403	Authentication failed.

## Error Codes

See [Error Codes](#).

## 5.5.3 Deleting Users in Batches

### Function

This API is used to delete multiple users of a Kafka instance.

### URI

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

**Table 5-108** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

Table 5-109 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Deletion type. Currently, only <b>delete</b> is supported.
users	No	Array of strings	User list.

## Response Parameters

None

## Example Requests

Deleting users in batches.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/users
{
  "action": "delete",
  "users": [ "testuser" ]
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The deletion is successful.

## Error Codes

See [Error Codes](#).

## 5.5.4 Resetting a User Password

### Function

This API is used to reset a user password.

### URI

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

**Table 5-110** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
user_name	Yes	String	Username.

## Request Parameters

**Table 5-111** Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	New password.

## Response Parameters

None

## Example Requests

Resetting a user password.

```
PUT https://{endpoint}/v2/{project_id}/instances/{instance_id}/users/{user_name}
{
  "new_password" : "Cloud@123"
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	Password reset successfully.

## Error Codes

See [Error Codes](#).

## 5.5.5 Querying User Permissions

### Function

This API is used to query user permissions.

User management is supported only when SASL is enabled for the Kafka instance.

### URI

GET /v1/{project\_id}/instances/{instance\_id}/topics/{topic\_name}/accesspolicy

**Table 5-112** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic_name	Yes	String	Topic name.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-113** Response body parameters

Parameter	Type	Description
name	String	Topic name.
topic_type	Integer	Topic type.
policies	Array of <b>PolicyEntity</b> objects	Permission list.

**Table 5-114** PolicyEntity

Parameter	Type	Description
owner	Boolean	Whether the user is the one selected during topic creation.
user_name	String	Username.

Parameter	Type	Description
access_policy	String	Permission type. <ul style="list-style-type: none"> <li>• <b>all</b>: publish and subscribe permissions.</li> <li>• <b>pub</b>: publish permissions.</li> <li>• <b>sub</b>: subscribe permissions.</li> </ul>

## Example Requests

Querying user permissions for a topic.

```
GET https://{endpoint}/v1/{project_id}/instances/{instance_id}/topics/{topic_name}/accesspolicy
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "name" : "topic-test",
  "policies" : [ {
    "owner" : false,
    "user_name" : "xxxa",
    "access_policy" : "pub"
  }, {
    "owner" : false,
    "user_name" : "root",
    "access_policy" : "all"
  } ],
  "topic_type" : 0
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.5.6 Granting User Permissions

### Function

This API is used to grant user permissions.

User management is supported only when SASL is enabled for the Kafka instance.

## URI

POST /v1/{project\_id}/instances/{instance\_id}/topics/accesspolicy

**Table 5-115** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-116** Request body parameters

Parameter	Mandatory	Type	Description
topics	Yes	Array of <a href="#">AccessPolicyTopicEntity</a> objects	Topic list.

**Table 5-117** AccessPolicyTopicEntity

Parameter	Mandatory	Type	Description
name	Yes	String	Topic name.
policies	Yes	Array of <a href="#">AccessPolicyEntity</a> objects	Permission list.

**Table 5-118** AccessPolicyEntity

Parameter	Mandatory	Type	Description
user_name	No	String	Username.
access_policy	No	String	Permission type. <ul style="list-style-type: none"> <li>• <b>all</b>: publish and subscribe permissions.</li> <li>• <b>pub</b>: publish permissions.</li> <li>• <b>sub</b>: subscribe permissions.</li> </ul>

## Response Parameters

**Status code: 400**

**Table 5-119** Response body parameters

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

**Status code: 403**

**Table 5-120** Response body parameters

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

## Example Requests

Granting user permissions.

POST https://{endpoint}/v1/{project\_id}/instances/{instance\_id}/topics/accesspolicy

```
{
  "topics": [ {
    "name": "topic-test",
    "policies": [ {
      "user_name": "root",
      "access_policy": "all"
    } ]
  } ]
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	The update is successful.
400	Invalid parameters.
403	Authentication failed.



## Error Codes

See [Error Codes](#).

# 5.6 Message Query

## 5.6.1 Querying Messages

### Function

This API is used to query the offset and content of a message. This API queries the message offset based on the timestamp and then queries the message content based on the offset.

### URI

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

**Table 5-121** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Tenant's project ID.
instance_id	Yes	String	Instance ID.

**Table 5-122** Query Parameters

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic name. A topic name must start with a letter and can only contain letters, hyphens (-), underscores (_), and digits.
asc	No	Boolean	Whether to sort messages by time.
start_time	No	String	Start time. The value is a Unix timestamp, in millisecond. This parameter is mandatory when you query the message offset.

Parameter	Mandatory	Type	Description
end_time	No	String	End time. The value is a Unix timestamp, in millisecond. This parameter is mandatory when you query the message offset.
limit	No	String	Page size. The value ranges from 0 to 50.
offset	No	String	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
download	No	Boolean	Whether download is required.
message_offset	No	String	Message offset. <b>This parameter is mandatory when you query the message content.</b> If <b>start_time</b> and <b>end_time</b> are not empty, this parameter is invalid.
partition	No	String	Partition. <b>This parameter is mandatory when you query the message content.</b> If <b>start_time</b> and <b>end_time</b> are not empty, this parameter is invalid.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-123** Response body parameters

Parameter	Type	Description
messages	Array of <b>MessagesEntity</b> objects	Message list.

Parameter	Type	Description
total	Long	Total number of messages.
size	Long	Number of messages.

**Table 5-124** MessagesEntity

Parameter	Type	Description
topic	String	Topic name.
partition	Integer	Partition where the message is located.
key	String	Message key.
value	String	Message content.
size	Integer	Message size.
timestamp	Long	Topic name.
huge_message	Boolean	Big data flag.
message_offset	Integer	Message offset.
message_id	String	Message ID.
app_id	String	Application ID.
tag	String	Message label.

**Status code: 400**

**Table 5-125** Response body parameters

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

**Status code: 403**

**Table 5-126** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error description.

## Example Requests

- Querying the message offset.  
 GET https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/messages?asc=false&end\_time=1608609032042&limit=10&offset=0&start\_time=1608608432042&topic=topic-test
- Querying the message content.  
 GET https://{endpoint}/v2/{project\_id}/instances/{instance\_id}/messages?download=false&message\_offset=0&partition=0&topic=topic-test

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "messages": [ {
    "topic": "topic-test",
    "partition": 0,
    "value": "hello world",
    "size": 21,
    "timestamp": 1607598463502,
    "huge_message": false,
    "message_offset": 4,
    "message_id": "",
    "app_id": "",
    "tag": ""
  } ],
  "total": 1,
  "size": 1
}
```

## Status Codes

Status Code	Description
200	The query is successful.
400	Invalid parameters.
403	Authentication failed.

## Error Codes

See [Error Codes](#).

## 5.6.2 Querying a Message with a Specified Offset

### Function

This API is used to query a message with a specified offset.

### URI

GET /v2/{project\_id}/instances/{instance\_id}/management/topics/{topic}/partitions/{partition}/message

**Table 5-127** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name. A topic name must start with a letter and can only contain letters, hyphens (-), underscores (_), and digits.
partition	Yes	Integer	Partition number.

**Table 5-128** Query Parameters

Parameter	Mandatory	Type	Description
message_offset	Yes	String	Message offset.

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-129** Response body parameters

Parameter	Type	Description
message	Array of <a href="#">ShowPartitionMessageEntity</a> objects	Message list.

**Table 5-130** ShowPartitionMessageEntity

Parameter	Type	Description
key	String	Message key.
value	String	Message content.
topic	String	Topic name.
partition	Integer	Partition number.
message_offset	Long	Message offset.
size	Integer	Message size in bytes.
timestamp	Long	Time when a message is created. The value is a Unix timestamp. The unit is millisecond.

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/topics/{topic}/partitions/{partition}/message?message_offset={message_offset}
```

## Example Responses

**Status code: 200**

The message with the specified offset is queried successfully.

```
{
  "message": [ {
    "topic": "mytest",
    "partition": 0,
    "message_offset": 7,
    "key": null,
    "value": "kasjdf",
    "size": 6,
    "timestamp": 1568125036045
  } ]
}
```

## Status Codes

Status Code	Description
200	The message with the specified offset is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.6.3 Querying a Message with a Specified Time Period

### Function

This API is used to query a message with a specified time period.

### URI

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

**Table 5-131** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name. A topic name must start with a letter and can only contain letters, hyphens (-), underscores (_), and digits.

**Table 5-132** Query Parameters

Parameter	Mandatory	Type	Description
start_time	No	String	Query start time as a Unix timestamp. Default value: <b>0</b> .
end_time	No	String	Query end time, as a Unix timestamp. Default value: current system time.
limit	No	Integer	Number of messages returned on a page. Default value: <b>10</b> .

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.
partition	No	String	Partition number. The default value is <b>-1</b> , indicating that all partitions are queried.

## Request Parameters

None

## Response Parameters

Status code: 200

Table 5-133 Response body parameters

Parameter	Type	Description
messages	Array of <b>messages</b> objects	Message list.
messages_count	Integer	Total number of messages.
offsets_count	Integer	Total number of pages.
offset	Integer	Current page.

Table 5-134 messages

Parameter	Type	Description
topic	String	Topic name.
partition	Integer	Partition number.
message_offset	Integer	Message offset.
size	Integer	Message size in bytes.
timestamp	Long	Time when a message is created. The value is a Unix timestamp. The unit is millisecond.



## Example Requests

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

## Example Responses

**Status code: 200**

The message with the specified time period is queried successfully.

```
{
  "messages" : [ {
    "topic" : "mytest",
    "partition" : 0,
    "message_offset" : 7,
    "size" : 6,
    "timestamp" : 1568125036045
  } ],
  "messages_count" : 1,
  "offsets_count" : 1,
  "offset" : 1
}
```

## Status Codes

Status Code	Description
200	The message with the specified time period is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.6.4 Querying Offset of the Earliest Message in a Partition

### Function

This API is used to query the offset of the earliest message in a partition.

### URI

```
GET /v2/{project_id}/instances/{instance_id}/management/topics/{topic}/
partitions/{partition}/beginning-message
```

**Table 5-135** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

Parameter	Mandatory	Type	Description
topic	Yes	String	Topic name. A topic name must start with a letter and can only contain letters, hyphens (-), underscores (_), and digits.
partition	Yes	Integer	Partition number.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-136** Response body parameters

Parameter	Type	Description
topic	String	Topic name.
partition	Integer	Partition number.
offset	Integer	Offset of the latest message.
timestamp	Long	Time when a message is created. The value is a Unix timestamp. The unit is millisecond.

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/topics/{topic}/partitions/{partition}/beginning-message
```

## Example Responses

Status code: 200

The offset of the earliest message in a partition is queried successfully.

```
{
  "topic" : "mytest",
  "partition" : 0,
  "offset" : 9,
  "timestamp" : 1568125039164
}
```

## Status Codes

Status Code	Description
200	The offset of the earliest message in a partition is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.6.5 Querying Offset of the Latest Message in a Partition

### Function

This API is used to query the offset of the latest message in a partition.

### URI

GET /v2/{project\_id}/instances/{instance\_id}/management/topics/{topic}/partitions/{partition}/end-message

**Table 5-137** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
topic	Yes	String	Topic name. A topic name must start with a letter and can only contain letters, hyphens (-), underscores (_), and digits.
partition	Yes	Integer	Partition number.

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-138** Response body parameters

Parameter	Type	Description
topic	String	Topic name.
partition	Integer	Partition number.
offset	Integer	Offset of the latest message.
timestamp	Long	Time when a message is created. The value is a Unix timestamp. The unit is millisecond.

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/instances/{instance_id}/management/topics/{topic}/partitions/{partition}/end-message
```

## Example Responses

**Status code: 200**

The offset of the latest message in a partition is queried successfully.

```
{
  "topic" : "mytest",
  "partition" : 0,
  "offset" : 9,
  "timestamp" : 1568125039164
}
```

## Status Codes

Status Code	Description
200	The offset of the latest message in a partition is queried successfully.

## Error Codes

See [Error Codes](#).

# 5.7 Background Task Management

## 5.7.1 Listing Background Tasks

### Function

This API is used to list background tasks of an instance.

## URI

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

**Table 5-139** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

**Table 5-140** Query Parameters

Parameter	Mandatory	Type	Description
start	No	Integer	ID of the task where the query starts.
limit	No	Integer	Number of tasks to be queried.
begin_time	No	String	Time of task where the query starts. The format is YYYYMMDDHHmmss.
end_time	No	String	Time of task where the query ends. The format is YYYYMMDDHHmmss.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-141** Response body parameters

Parameter	Type	Description
task_count	String	Number of tasks.
tasks	Array of <b>tasks</b> objects	Task list.

**Table 5-142** tasks

Parameter	Type	Description
id	String	Task ID.
name	String	Task name.
user_name	String	Username.
user_id	String	User ID.
params	String	Task parameters.
status	String	Task status.
created_at	String	Start time.
updated_at	String	End time.

## 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**

Background tasks are listed successfully.

```
{
  "task_count": "4",
  "tasks": [ {
    "id": "8abfa7b372160bfd0172165864064079",
    "name": "modifyAutoTopic",
    "user_name": "paas_dms",
    "user_id": "3df5acbc24a54fadb62a043c9000a307",
    "params": "{\"old_auto_status\":true,\"new_auto_status\":false}",
    "status": "EXECUTING",
    "created_at": "2020-05-15T03:19:51.046Z",
    "updated_at": "2020-05-15T03:19:51.065Z"
  }, {
    "id": "8abfa7b372160bfd017216560af83e6e",
    "name": "changeRetentionPolicy",
    "user_name": "paas_dms",
    "user_id": "3df5acbc24a54fadb62a043c9000a307",
    "params": "{\"new_retention_policy\": \"produce_reject\", \"origin_retention_policy\": \"time_base\"}",
    "status": "SUCCESS",
    "created_at": "2020-05-15T03:17:17.176Z",
    "updated_at": "2020-05-15T03:17:22.162Z"
  } ]
}
```

## Status Codes

Status Code	Description
200	Background tasks are listed successfully.

## Error Codes

See [Error Codes](#).

## 5.7.2 Querying a Background Task

### Function

This API is used to query a specified background task.

### URI

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

**Table 5-143** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
task_id	Yes	String	Task ID.

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 5-144** Response body parameters

Parameter	Type	Description
task_count	String	Number of tasks.
tasks	Array of <a href="#">tasks</a> objects	Task list.

**Table 5-145** tasks

Parameter	Type	Description
id	String	Task ID.
name	String	Task name.
user_name	String	Username.

Parameter	Type	Description
user_id	String	User ID.
params	String	Task parameters.
status	String	Task status.
created_at	String	Start time.
updated_at	String	End time.

## Example Requests

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

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "task_count": "1",
  "tasks": [ {
    "id": "8abfa7b272adc5b40172b73130065ae7",
    "name": "bindInstancePublicIp",
    "user_name": "paas_dms",
    "user_id": "3df5acbc24a54fadb62a043c9000a307",
    "params": "{\"public_ip_id\":\"1aea7aed-e7d8-40ea-b3de-6f3ee9d5db9f\",\"public_ip_address\":\
    \"100.93.2.18\",\"enable_public_ip\":true}",
    "status": "SUCCESS",
    "created_at": "2020-06-15T08:55:53.606Z",
    "updated_at": "2020-06-15T08:55:56.600Z"
  } ]
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

## 5.7.3 Deleting a Background Task

### Function

This API is used to delete a specified background task.



## URI

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

**Table 5-146** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.
task_id	Yes	String	Task ID.

## Request Parameters

None

## Response Parameters

None

## Example Requests

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

## Example Responses

None

## Status Codes

Status Code	Description
204	The background task is deleted successfully.

## Error Codes

See [Error Codes](#).

# 5.8 Tag Management

## 5.8.1 Batch Adding or Deleting Tags

### Function

This API is used to add or delete instance tags in batches.

## URI

POST /v2/{project\_id}/kafka/{instance\_id}/tags/action

**Table 5-147** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

**Table 5-148** Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Operation. Only lowercase letters are supported. <ul style="list-style-type: none"> <li>• <b>create</b>: Tags are created.</li> <li>• <b>delete</b>: Tags are deleted.</li> </ul>
tags	No	Array of <b>TagEntity</b> objects	Tag list.

**Table 5-149** TagEntity

Parameter	Mandatory	Type	Description
key	No	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0–31) characters and the following special characters: =*<>, /

Parameter	Mandatory	Type	Description
value	No	String	<p>Tag value, which can contain a maximum of 43 Unicode characters.</p> <p>The value cannot be left blank or be an empty string.</p> <p>It cannot contain nonprintable ASCII (0–31) characters and the following special characters: =*&lt;&gt;, /</p>

## Response Parameters

None

## Example Requests

```
POST https://{endpoint}/v2/{project_id}/kafka/{instance_id}/tags/action
{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	Tags are successfully added or deleted.

## Error Codes

See [Error Codes](#).

## 5.8.2 Listing Tags of an Instance

### Function

This API is used to query instance tags.

## URI

GET /v2/{project\_id}/kafka/{instance\_id}/tags

**Table 5-150** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-151** Response body parameters

Parameter	Type	Description
tags	Array of <a href="#">TagEntity</a> objects	Tag list.

**Table 5-152** TagEntity

Parameter	Type	Description
key	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: <code>=*&lt;&gt;, /</code>
value	String	Tag value, which can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: <code>=*&lt;&gt;, /</code>

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/kafka/{instance_id}/tags
```

## Example Responses

**Status code: 200**

The instance tags are listed successfully.

```
{
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

## Status Codes

Status Code	Description
200	The instance tags are listed successfully.

## Error Codes

See [Error Codes](#).

## 5.8.3 Listing Tags of a Project

### Function

This API is used to query project tags.

### URI

```
GET /v2/{project_id}/kafka/tags
```

**Table 5-153** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 5-154** Response body parameters

Parameter	Type	Description
tags	Array of <a href="#">TagMultyValueEntity</a> objects	Tag list.

**Table 5-155** TagMultyValueEntity

Parameter	Type	Description
key	String	Tag key, which can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /
values	Array of strings	Tag value, which can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>, /

## Example Requests

```
GET https://{endpoint}/v2/{project_id}/kafka/tags
```

## Example Responses

Status code: 200

The project tags are listed successfully.

```
{
  "tags" : [ {
    "key" : "key1",
    "values" : [ "value-test", "value1" ]
  }, {
    "key" : "key2",
    "values" : [ "value2" ]
  } ]
}
```

## Status Codes

Status Code	Description
200	The project tags are listed successfully.

## Error Codes

See [Error Codes](#).

# 5.9 Other APIs

## 5.9.1 Listing Maintenance Time Windows

### Function

This API is used to query the start time and end time of maintenance time windows.

### URI

GET /v2/instances/maintain-windows

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-156** Response body parameters

Parameter	Type	Description
maintain_windows	Array of <a href="#">MaintainWindowsEntity</a> objects	List of supported maintenance time windows.

**Table 5-157** MaintainWindowsEntity

Parameter	Type	Description
default	Boolean	Whether the maintenance time window is set to the default time segment.

Parameter	Type	Description
end	String	End time of the maintenance time window.
begin	String	Start time of the maintenance time window.
seq	Integer	Sequence number.

## Example Requests

```
GET https://{endpoint}/v2/instances/maintain-windows
```

## Example Responses

**Status code: 200**

The consumption of the message is successfully acknowledged.

```
{
  "maintain_windows" : [ {
    "default" : false,
    "seq" : 1,
    "begin" : "22",
    "end" : "02"
  }, {
    "default" : true,
    "seq" : 2,
    "begin" : "02",
    "end" : "06"
  }, {
    "default" : false,
    "seq" : 3,
    "begin" : "06",
    "end" : "10"
  }, {
    "default" : false,
    "seq" : 4,
    "begin" : "10",
    "end" : "14"
  }, {
    "default" : false,
    "seq" : 5,
    "begin" : "14",
    "end" : "18"
  }, {
    "default" : false,
    "seq" : 6,
    "begin" : "18",
    "end" : "22"
  }
]
```

## Status Codes

Status Code	Description
200	The consumption of the message is successfully acknowledged.



## Error Codes

See [Error Codes](#).

## 5.9.2 Listing AZ Information

### Function

This API is used to query the AZ ID for creating an instance.

### URI

GET /v2/available-zones

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 5-158** Response body parameters

Parameter	Type	Description
region_id	String	Region ID.
available_zones	Array of <a href="#">available_zones</a> objects	Array of AZs.

**Table 5-159** available\_zones

Parameter	Type	Description
soldOut	Boolean	Whether resources are sold out.
id	String	AZ ID.
code	String	AZ code.
name	String	AZ name.
port	String	AZ port.
resource_availability	String	Whether there are available resources in the AZ.
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}/v2/available-zones
```

## Example Responses

**Status code: 200**

The AZ information is queried successfully.

```
{
  "regionId": "xxx",
  "available_zones": [ {
    "soldOut": false,
    "id": "d539378ec1314c85b76fefa3f7071458",
    "code": "xxx",
    "name": "AZ 2.",
    "port": "8003",
    "resource_availability": "true",
    "default_az": true,
    "remain_time": 9223372036854776000,
    "ipv6_enable": false
  }, {
    "soldOut": false,
    "id": "9f1c5806706d4c1fb0eb72f0a9b18c77",
    "code": "xxx",
    "name": "AZ 3.",
    "port": "443",
    "resource_availability": "true",
    "default_az": false,
    "remain_time": 9223372036854776000,
    "ipv6_enable": false
  } ]
}
```

## Status Codes

Status Code	Description
200	The AZ information is queried successfully.

## Error Codes

See [Error Codes](#).

## 5.9.3 Querying Product Specifications List

### Function

This API is used to query the product specifications list.

### URI

```
GET /v2/{engine}/products
```

**Table 5-160** Path Parameters

Parameter	Mandatory	Type	Description
engine	Yes	String	Message engine.

**Table 5-161** Query Parameters

Parameter	Mandatory	Type	Description
product_id	No	String	Product ID.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 5-162** Response body parameters

Parameter	Type	Description
engine	String	Message engine of DMS.
versions	Array of strings	Supported versions.
products	Array of <a href="#">ListEngineProductsEntity</a> objects	Product specification details.

**Table 5-163** ListEngineProductsEntity

Parameter	Type	Description
type	String	Product type. Currently, single-node and cluster types are supported.
product_id	String	Product ID.
ecs_flavor_id	String	ECS flavor.
billing_code	String	Billing mode.
arch_types	Array of strings	CPU architecture.

Parameter	Type	Description
charging_mode	Array of strings	Billing mode. <b>monthly</b> : yearly/monthly; <b>hourly</b> : pay-per-use
ios	Array of <a href="#">ListEngineIosEntity</a> objects	List of supported disk I/O types.
support_features	Array of <a href="#">ListEngineSupportFeaturesEntity</a> objects	List of features supported by instances of the current specifications.
properties	<a href="#">ListEnginePropertiesEntity</a> object	Attribute of instances of the current specifications.

**Table 5-164** ListEngineIosEntity

Parameter	Type	Description
io_spec	String	Disk I/O code.
type	String	Disk type.
available_zones	Array of strings	Available AZs.
unavailable_zones	Array of strings	Unavailable AZs.

**Table 5-165** ListEngineSupportFeaturesEntity

Parameter	Type	Description
name	String	Feature name.
properties	ListEngineSupportFeaturesPropertiesEntity object	Description of the features supported by the instance.

**Table 5-166** ListEnginePropertiesEntity

Parameter	Type	Description
max_partition_per_broker	String	Maximum number of partitions of each broker.

Parameter	Type	Description
max_broker	String	Maximum number of brokers.
max_storage_per_node	String	Maximum storage space of each broker. The unit is GB.
max_consumer_per_broker	String	Maximum number of consumers of each broker.
min_broker	String	Minimum number of brokers.
max_bandwidth_per_broker	String	Maximum bandwidth of each broker.
min_storage_per_node	String	Minimum storage space of each broker. The unit is GB.
max_tps_per_broker	String	Maximum TPS of each broker.
product_alias	String	Alias of <b>product_id</b> .

## Example Requests

GET https://{endpoint}/v2/kafka/products

## Example Responses

**Status code: 200**

The product specifications are listed successfully.

```
{
  "engine": "kafka",
  "versions": [ "1.1.0", "2.3.0" ],
  "products": [ {
    "type": "cluster",
    "product_id": "c6.2u4g.cluster",
    "ecs_flavor_id": "c6.large.2",
    "billing_code": "dms.platinum.c6",
    "arch_types": [ "X86" ],
    "charging_mode": [ "monthly", "hourly" ],
    "ios": [ {
      "io_spec": "dms.physical.storage.high.v2",
      "type": "evs",
      "available_zones": [ "xxx", "xxx" ],
      "unavailable_zones": [ "xxx", "xxx" ]
    }, {
      "io_spec": "dms.physical.storage.ultra.v2",
      "type": "evs",
      "available_zones": [ "xxx", "xxx" ],
      "unavailable_zones": [ "xxx", "xxx" ]
    }
  ],
  "support_features": [ {
    "name": "connector_obs",
    "properties": {
      "max_task": "10",
      "max_node": "10",
      "min_task": "1",
      "min_node": "2"
    }
  }
  ]
}
```

```

    }
  }],
  "properties": {
    "max_partition_per_broker": "250",
    "max_broker": "30",
    "max_storage_per_node": "10000",
    "max_consumer_per_broker": "4000",
    "min_broker": "3",
    "max_bandwidth_per_broker": "100",
    "min_storage_per_node": "200",
    "max_tps_per_broker": "30000",
    "product_alias": "kafka.2u4g.cluster"
  }
}, {
  "type": "cluster",
  "product_id": "c6.4u8g.cluster",
  "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",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  }, {
    "io_spec": "dms.physical.storage.ultra.v2",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  } ],
  "support_features": [ {
    "name": "connector_obs",
    "properties": {
      "max_task": "10",
      "max_node": "10",
      "min_task": "1",
      "min_node": "2"
    }
  } ],
  "properties": {
    "max_partition_per_broker": "500",
    "max_broker": "30",
    "max_storage_per_node": "20000",
    "max_consumer_per_broker": "4000",
    "min_broker": "3",
    "max_bandwidth_per_broker": "100",
    "min_storage_per_node": "400",
    "max_tps_per_broker": "100000",
    "product_alias": "kafka.4u8g.cluster"
  }
}, {
  "type": "cluster",
  "product_id": "c6.8u16g.cluster",
  "ecs_flavor_id": "c6.2xlarge.2",
  "billing_code": "dms.platinum.c6",
  "arch_types": [ "X86" ],
  "charging_mode": [ "monthly", "hourly" ],
  "ios": [ {
    "io_spec": "dms.physical.storage.high.v2",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  }, {
    "io_spec": "dms.physical.storage.ultra.v2",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  } ],
} ],

```

```

"support_features": [ {
  "name": "connector_obs",
  "properties": {
    "max_task": "10",
    "max_node": "10",
    "min_task": "1",
    "min_node": "2"
  }
} ],
"properties": {
  "max_partition_per_broker": "1000",
  "max_broker": "30",
  "max_storage_per_node": "30000",
  "max_consumer_per_broker": "4000",
  "min_broker": "3",
  "max_bandwidth_per_broker": "100",
  "min_storage_per_node": "800",
  "max_tps_per_broker": "150000",
  "product_alias": "kafka.8u16g.cluster"
}
}, {
  "type": "cluster",
  "product_id": "c6.12u24g.cluster",
  "ecs_flavor_id": "c6.3xlarge.2",
  "billing_code": "dms.platinum.c6",
  "arch_types": [ "X86" ],
  "charging_mode": [ "monthly", "hourly" ],
  "ios": [ {
    "io_spec": "dms.physical.storage.high.v2",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  }, {
    "io_spec": "dms.physical.storage.ultra.v2",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],
    "unavailable_zones": [ "xxx", "xxx" ]
  } ],
  "support_features": [ {
    "name": "connector_obs",
    "properties": {
      "max_task": "10",
      "max_node": "10",
      "min_task": "1",
      "min_node": "2"
    }
  } ],
  "properties": {
    "max_partition_per_broker": "1500",
    "max_broker": "30",
    "max_storage_per_node": "30000",
    "max_consumer_per_broker": "4000",
    "min_broker": "3",
    "max_bandwidth_per_broker": "100",
    "min_storage_per_node": "1200",
    "max_tps_per_broker": "200000",
    "product_alias": "kafka.12u24g.cluster"
  }
}, {
  "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",
    "type": "evs",
    "available_zones": [ "xxx", "xxx" ],

```

```

"unavailable_zones" : [ "xxx", "xxx" ]
}, {
  "io_spec" : "dms.physical.storage.ultra.v2",
  "type" : "evs",
  "available_zones" : [ "xxx", "xxx" ],
  "unavailable_zones" : [ "xxx", "xxx" ]
}],
"support_features" : [ {
  "name" : "connector_obs",
  "properties" : {
    "max_task" : "10",
    "max_node" : "10",
    "min_task" : "1",
    "min_node" : "2"
  }
}
}],
"properties" : {
  "max_partition_per_broker" : "2000",
  "max_broker" : "30",
  "max_storage_per_node" : "30000",
  "max_consumer_per_broker" : "4000",
  "min_broker" : "3",
  "max_bandwidth_per_broker" : "100",
  "min_storage_per_node" : "1600",
  "max_tps_per_broker" : "250000",
  "product_alias" : "kafka.16u32g.cluster"
}
}
}
}

```

## Status Codes

Status Code	Description
200	The product specifications are listed successfully.

## Error Codes

See [Error Codes](#).

## 5.9.4 Querying Kafka Instance Monitoring Dimensions

### Function

This API is used to query Kafka instance monitoring dimensions.

### URI

GET /v2/{project\_id}/instances/{instance\_id}/ces-hierarchy

**Table 5-167** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID.
instance_id	Yes	String	Instance ID.



## Request Parameters

None

## Response Parameters

Status code: 200

Table 5-168 Response body parameters

Parameter	Type	Description
dimensions	Array of <b>dimensions</b> objects	Monitoring dimensions.
instance_ids	Array of <b>instance_ids</b> objects	Instance information.
nodes	Array of <b>nodes</b> objects	Broker information.
queues	Array of <b>queues</b> objects	Topic information.
groups	Array of <b>groups</b> objects	Consumer group information.

Table 5-169 dimensions

Parameter	Type	Description
name	String	Monitoring dimension name.
metrics	Array of strings	Metric name.
key_name	Array of strings	Key used for monitoring query.
dim_router	Array of strings	Monitoring dimension route.
children	Array of <b>children</b> objects	List of secondary dimensions.

**Table 5-170** children

Parameter	Type	Description
name	String	Secondary dimension name.
metrics	Array of strings	Metrics on the secondary dimension.
key_name	Array of strings	Key used for monitoring query.
dim_router	Array of strings	Monitoring dimension route.

**Table 5-171** instance\_ids

Parameter	Type	Description
name	String	Instance ID.

**Table 5-172** nodes

Parameter	Type	Description
name	String	Broker name.

**Table 5-173** queues

Parameter	Type	Description
name	String	Topic name.
partitions	Array of <a href="#">partitions</a> objects	Partition list.

**Table 5-174** partitions

Parameter	Type	Description
name	String	Partition name.

**Table 5-175** groups

Parameter	Type	Description
name	String	Consumer group name.
queues	Array of <b>queues</b> objects	Topic information.

**Table 5-176** queues

Parameter	Type	Description
name	String	Topic name.
partitions	Array of <b>partitions</b> objects	Partition information.

**Table 5-177** partitions

Parameter	Type	Description
name	String	Partition name.

## Example Requests

GET [https://{endpoint}/v2/{project\\_id}/instances/{instance\\_id}/ces-hierarchy](https://{endpoint}/v2/{project_id}/instances/{instance_id}/ces-hierarchy)

## Example Responses

**Status code: 200**

The information is listed 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 Codes

Status Code	Description
200	The information is listed successfully.

## Error Codes

See [Error Codes](#).

# 6 Permissions Policies and Supported Actions

---

This chapter describes fine-grained permissions management for your DMS for Kafka instances. If your account does not require individual IAM users, you can skip this chapter.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services 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 the permissions required to call all APIs, but IAM users must be assigned the permissions to call the required APIs. 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 wants to query Kafka instances using an API, the user must have been granted permissions that allow the **dms:instance:create** action.

## Supported Actions

DMS for Kafka 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:

- **Permission:** a statement in a policy that allows or denies certain operations.
- **APIs:** REST APIs that can be called by a user who has been granted specific permissions.

- Action: Specific operations that are allowed or denied.
- 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.

DMS for Kafka supports the following actions that can be defined in custom policies. Permissions must be obtained before calling DMS APIs. For details on how to obtain permissions, visit the [Identity and Access Management help center](#).

**Table 6-1** DMS for Kafka actions

Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Creating an Instance	POST /v2/{project_id}/instances	dms:instance:create	√	√
Querying an Instance	GET /v2/{project_id}/instances/{instance_id}	dms:instance:get	√	√
Modifying Instance Information	PUT /v2/{project_id}/instances/{instance_id}	dms:instance:modify	√	√
Deleting an Instance	DELETE /v2/{project_id}/instances/{instance_id}	dms:instance:delete	√	√
Listing All Instances	GET /v2/{project_id}/instances	dms:instance:list	√	√
Batch Restarting or Deleting Instances	POST /v2/{project_id}/instances/action	Restart: dms:instance:modifyStatus  Delete: dms:instance:delete	√	√
Resetting Kafka Manager Password	PUT /v2/{project_id}/instances/{instance_id}/kafka-manager-password	dms:instance:resetAuthInfo	√	√
Resetting the Password	POST /v2/{project_id}/instances/{instance_id}/password	dms:instance:resetAuthInfo	√	√

Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Restarting Kafka Manager	PUT /v2/{project_id}/instances/{instance_id}/restart-kafka-manager	dms:instance:modifyStatus	√	√
Configuring Automatic Topic Creation	POST /v2/{project_id}/instances/{instance_id}/autotopic	dms:instance:modify	√	√
Modifying the Private IP Address for Cross-VPC Access	POST /v2/{project_id}/instances/{instance_id}/crossvpc/modify	dms:instance:modify	√	√
Modifying Instance Specifications	POST /v2/{project_id}/instances/{instance_id}/extend	dms:instance:scale	√	√
Batch Deleting Topics of a Kafka Instance	POST /v2/{project_id}/instances/{instance_id}/topics/delete	dms:instance:modify	√	√
Creating a Topic for a Kafka Instance	POST /v2/{project_id}/instances/{instance_id}/topics	dms:instance:modify	√	√
Listing Topics of a Kafka Instance	GET /v2/{project_id}/instances/{instance_id}/topics	dms:instance:get	√	√
Modifying Topics of a Kafka Instance	PUT /v2/{project_id}/instances/{instance_id}/topics	dms:instance:modify	√	√
Deleting Users in Batches	PUT /v2/{project_id}/instances/{instance_id}/users	dms:instance:modify	√	√
Creating a User	POST /v2/{project_id}/instances/{instance_id}/users	dms:instance:modify	√	√



Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Resetting a User Password	PUT /v2/{project_id}/instances/{instance_id}/users/{user_name}	dms:instance: get	√	√
Querying the User List	GET /v2/{project_id}/instances/{instance_id}/users	dms:instance: get	√	√
Querying User Permissions	GET /v1/{project_id}/instances/{instance_id}/topics/{topic_name}/accesspolicy	dms:instance: get	√	√
Granting User Permissions	POST /v1/{project_id}/instances/{instance_id}/topics/accesspolicy	dms:instance: modify	√	√
Querying Messages	GET /v2/{project_id}/instances/{instance_id}/messages	dms:instance: get	√	√
Deleting a Background Task	DELETE /v2/{project_id}/instances/{instance_id}/tasks/{task_id}	dms:instance: deleteBackgroundTask	√	√
Listing Background Tasks	GET /v2/{project_id}/instances/{instance_id}/tasks	dms:instance: getBackgroundTask	√	√
Querying a Background Task	GET /v2/{project_id}/instances/{instance_id}/tasks/{task_id}	dms:instance: getBackgroundTask	√	√
Batch Adding or Deleting Tags	POST /v2/{project_id}/kafka/{instance_id}/tags/action	dms:instance: modify	√	√
Listing Tags of a Project	GET /v2/{project_id}/kafka/tags	dms:instance: get	√	√
Listing Tags of an Instance	GET /v2/{project_id}/kafka/{instance_id}/tags	dms:instance: get	√	√

Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Enabling or Disabling Public Access	This operation is supported only by using the console and not by calling APIs.	dms:instance:modify	√	√

# 7 Out-of-Date APIs

---

## 7.1 API V1

### 7.1.1 APIs for Managing Instances

#### 7.1.1.1 Creating an Instance

 NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Creating an Instance](#).

#### Function

This API is used to create a **pay-per-use** instance.

#### URI

POST /v1.0/{project\_id}/instances

[Table 7-1](#) describes the parameter.

**Table 7-1** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.

#### Request

##### Request parameters

[Table 7-2](#) describes the parameters.

**Table 7-2** Request parameters

Parameter	Type	Mandatory	Description
name	String	Yes	Indicates the instance name. An instance name starts with a letter, consists of 4 to 64 characters, and can contain only letters, digits, underscores (_), and hyphens (-).
description	String	No	Indicates the description of an instance. It is a character string containing not more than 1024 characters. <b>NOTE</b> The backslash (\) and quotation mark (") are special characters for JSON packets. When using these characters in a parameter value, add the escape character (\) before these characters, for example, \\ and \".
engine	String	Yes	Indicates the message engine. Set the value to <b>kafka</b> .
engine_version	String	Yes	Indicates the version of the message engine. Value: <b>1.1.0</b> or <b>2.3.0</b> .
specification	String	Yes	Indicates the baseline bandwidth of a Kafka instance, that is, the maximum amount of data transferred per unit time. Unit: MB Options: <ul style="list-style-type: none"> <li>• 100MB</li> <li>• 300MB</li> <li>• 600MB</li> <li>• 1200MB</li> </ul>
storage_space	Integer	Yes	Indicates the message storage space. Unit: GB. Value range: <ul style="list-style-type: none"> <li>• Kafka instance with <b>specification</b> being <b>100MB</b>: 600–90,000 GB</li> <li>• Kafka instance with <b>specification</b> being <b>300MB</b>: 1200–90,000 GB</li> <li>• Kafka instance with <b>specification</b> being <b>600MB</b>: 2400–90,000 GB</li> <li>• Kafka instance with <b>specification</b> being <b>1200MB</b>: 4800–90,000 GB</li> </ul>

Parameter	Type	Mandatory	Description
partition_num	Integer	Yes	<p>Indicates the maximum number of partitions in a Kafka instance.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• When <b>specification</b> is <b>100MB</b>: <b>300</b></li> <li>• When <b>specification</b> is <b>300MB</b>: <b>900</b></li> <li>• When <b>specification</b> is <b>600MB</b>: <b>1800</b></li> <li>• When <b>specification</b> is <b>1200 MB</b>: <b>1800</b></li> </ul>
access_user	String	No	<p>This parameter is mandatory when <b>ssl_enable</b> is set to <b>true</b>. This parameter is invalid when <b>ssl_enable</b> is set to <b>false</b>.</p> <p>Indicates a username. A username consists of 4 to 64 characters and can contain letters, digits, and hyphens (-).</p>
password	String	No	<p>This parameter is mandatory when <b>ssl_enable</b> is set to <b>true</b>. This parameter is invalid when <b>ssl_enable</b> is set to <b>false</b>.</p> <p>Indicates an instance password.</p> <p>The password must meet the following complexity requirements:</p> <ul style="list-style-type: none"> <li>• Must be a string consisting of 8 to 32 characters.</li> <li>• Must contain at least three of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#\$%^&amp;*()-_+=+ [{}];',&lt;.&gt;/?</li> </ul> </li> </ul>
vpc_id	String	Yes	<p>Indicates the VPC ID.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>• Method 1: Log in to VPC console and view the VPC ID in the VPC details.</li> <li>• Method 2: Query the VPC ID through the VPC API. For details, see <a href="#">Querying VPCs</a>.</li> </ul>

Parameter	Type	Mandatory	Description
security_group_id	String	Yes	<p>Indicates the security group which the instance belongs to.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>Method 1: Log in to VPC console. Choose <b>Access Control &gt; Security Groups</b> in the navigation pane on the left. On the displayed page, click the target security group. You can view the security group ID on the displayed page.</li> <li>Method 2: Call the API for querying security groups. For details, see <a href="#">Querying Security Groups</a>.</li> </ul>
subnet_id	String	Yes	<p>Indicates the subnet ID.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>Method 1: Log in to VPC console and click the target subnet on the <b>Subnets</b> tab page. You can view the network ID on the displayed page.</li> <li>Method 2: Call the API for querying subnets. For details, see <a href="#">Querying Subnets</a>.</li> </ul>
available_zones	Array	Yes	<p>Indicates the ID of the AZ where brokers reside and which has available resources. The parameter value cannot be an empty array or an empty array. For details on how to obtain the value, see <a href="#">Querying AZ Information</a>. Check whether the AZ has available resources.</p> <p>When creating a Kafka instance, you can select either 1 AZ or at least 3 AZ. When specifying AZs for brokers, use commas (,) to separate multiple AZs. Example parameter settings:</p> <ul style="list-style-type: none"> <li>One AZ: "available_zones": [ "a0865121f83b41cbafce65930a22a6e8" ]</li> <li>Three or more AZs: "available_zones": ["a0865121f83b41cbafce65930a22a6e8","a0865121f83b41cbafce65930a22a6e7","a0865121f83b41cbafce65930a22a6e6"]</li> </ul>
product_id	String	Yes	<p>Indicates the product ID.</p> <p>For details on how to obtain the ID, see <a href="#">Querying Product Specifications</a>.</p>

Parameter	Type	Mandatory	Description
kafka_manager_user	String	Yes	Indicates the username for logging in to Kafka Manager. The username consists of 4 to 64 characters and can contain letters, digits, hyphens (-), and underscores (_).
kafka_manager_password	String	Yes	Indicates the password for logging in to Kafka Manager. The password must meet the following complexity requirements: <ul style="list-style-type: none"> <li>• Must be a string consisting of 8 to 32 characters.</li> <li>• Must contain at least three of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#%&amp;*( )-_=+\  [{}];',&lt;.&gt;/?</li> </ul> </li> </ul>
maintain_begin	String	No	Indicates the time at which a maintenance time window starts. Format: HH:mm:ss <ul style="list-style-type: none"> <li>• The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details about how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Windows</a>.</li> <li>• The start time must be set to 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00.</li> <li>• Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_begin</b> is left blank, parameter <b>maintain_end</b> is also left blank. In this case, the system automatically sets the start time to 02:00:00.</li> </ul>

Parameter	Type	Mandatory	Description
maintain_end	String	No	<p>Indicates the time at which a maintenance time window ends.</p> <p>Format: HH:mm:ss</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details about how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Windows</a>.</li> <li>The end time is four hours later than the start time. For example, if the start time is 22:00:00, the end time is 02:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_end</b> is left blank, parameter <b>maintain_start</b> is also blank. In this case, the system automatically sets the end time to 06:00:00.</li> </ul>
enable_publicip	Boolean	No	<p>Indicates whether to enable public access for an instance.</p> <ul style="list-style-type: none"> <li><b>true</b>: enable</li> <li><b>false</b>: disable</li> </ul>
public_bandwidth	String	No	<p>Indicates the public network bandwidth. Unit: Mbit/s</p> <p>Value range:</p> <ul style="list-style-type: none"> <li>When <b>specification</b> is <b>100MB</b>, the value must be a multiple of the number of brokers and fall in the range from 3 to 900.</li> <li>When <b>specification</b> is <b>300MB</b>, the value must be a multiple of the number of brokers and fall in the range from 3 to 900.</li> <li>When <b>specification</b> is <b>600MB</b>, the value must be a multiple of the number of brokers and fall in the range from 4 to 1200.</li> <li>When <b>specification</b> is <b>1200MB</b>, the value must be a multiple of the number of brokers and fall in the range from 8 to 2400.</li> </ul>



Parameter	Type	Mandatory	Description
publicip_id	String	No	Indicates the 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> ).
ssl_enable	Boolean	No	Indicates whether to enable SSL-encrypted access. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>
retention_policy	String	No	Indicates the action to be taken when the memory usage reaches the disk capacity threshold. Options: <ul style="list-style-type: none"> <li>• <b>time_base</b>: Automatically delete the earliest messages.</li> <li>• <b>produce_reject</b>: Stop producing new messages.</li> </ul>
enable_auto_topic	Boolean	No	Indicates whether to enable automatic topic creation. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul> If automatic topic creation is enabled, a topic will be automatically created with 3 partitions and 3 replicas when a message is produced to or consumed from a topic that does not exist.
storage_spec_code	String	Yes	Indicates storage I/O specification. Options: <ul style="list-style-type: none"> <li>• <b>dms.physical.storage.high</b> or <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>100MB</b></li> <li>• <b>dms.physical.storage.high</b> or <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>300MB</b></li> <li>• <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>600MB</b></li> <li>• <b>dms.physical.storage.ultra</b> when the parameter <b>specification</b> is <b>1200MB</b></li> </ul>
enterprise_project_id	String	No	Indicates the enterprise project ID.
tags	Array<Object>	No	Indicates the list of tags.

**Table 7-3** tags

Parameter	Type	Mandatory	Description
key	String	No	Indicates the tag key. A tag key can contain a maximum of 36 Unicode characters. The key cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>\, /
value	String	No	Indicates the value. A tag value can contain a maximum of 43 Unicode characters. The value cannot be left blank or be an empty string. It cannot contain nonprintable ASCII (0-31) characters and the following special characters: =*<>\, /

```
{
  "name": "kafka-test",
  "engine": "kafka",
  "engine_version": "2.3.0",
  "specification": "100MB",
  "storage_space": 600,
  "partition_num": 300,
  "vpc_id": "b50c1aa7-39e0-420e-936b-ee5d35288f9c",
  "security_group_id": "d8c81e0f-de6a-4110-8c96-81af3eacb3d1",
  "subnet_id": "0b6cfaea-bce7-48eb-b38d-267c24df5f79",
  "available_zones": [
    "38b0f7a602344246bcb0da47b5d548e7"
  ],
  "product_id": "00300-30308-0--0",
  "kafka_manager_user": "test",
  "kafka_manager_password": "Zxxxx",
  "enable_publicip": true,
  "publicip_id": "87864b85-7097-4c06-9d62-718d7359a503,72c12ba7-fade-4b06-a680-01d335cf786d,11b535df-ed6d-4521-8d00-12bb60beb617",
  "storage_spec_code": "dms.physical.storage.high"
}
```

## Response

### Response parameters

[Table 7-4](#) describes the parameters.

**Table 7-4** Response parameters

Parameter	Type	Description
instance_id	String	Indicates the instance ID.

**Example response**

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

**Status Code**

[Table 7-5](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-5** Status code

Status Code	Description
200	The instance is created successfully.

**7.1.1.2 Querying an Instance**

 **NOTE**

This API is out-of-date and may not be maintained in the future. Please use the API described in [Querying an Instance](#).

**Function**

This API is used to query the details about an instance.

**URI**

GET /v1.0/{project\_id}/instances/{instance\_id}

[Table 7-6](#) describes the parameters.

**Table 7-6** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
instance_id	String	Yes	Indicates the instance ID.

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}
```

## Response

### Response parameters

[Table 7-7](#) describes the parameters.

**Table 7-7** Response parameters

Parameter	Type	Description
name	String	Indicates the instance name.
engine	String	Indicates the message engine.
engine_version	String	Indicates the version of the message engine.
specification	String	Indicates the instance specification.
storage_space	Integer	Indicates the message storage space. Unit: GB
partition_num	String	Indicates the total number of partitions in a Kafka instance.
used_storage_space	Integer	Indicates the used message storage space. Unit: GB
connect_addresses	String	Indicates the IP address of an instance.
port	Integer	Indicates the port number of an instance.
status	String	Indicates the status of an instance. For details, see <a href="#">Instance Status</a> .
instance_id	String	Indicates the instance ID.
resource_spec_code	String	Indicates the resource specifications identifier. <ul style="list-style-type: none"> <li><b>dms.instance.kafka.cluster.c3.mini:</b> Kafka instance, 100 MB/s reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.small.2:</b> Kafka instance, 300 MB/s reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.middle.2:</b> Kafka instance, 600 MB/s reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.high.2:</b> Kafka instance, 1200 MB/s reference bandwidth</li> </ul>

Parameter	Type	Description
type	String	Indicates the instance type. Value: <b>cluster</b>
charging_mode	Integer	Indicates the billing mode.
vpc_id	String	Indicates the ID of a VPC.
vpc_name	String	Indicates the name of a VPC.
created_at	String	Indicates the time when an instance is created. 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	Indicates the subnet CIDR block.
available_zones	Array	Indicates the ID of the AZ to which the instance node belongs. The AZ ID is returned.
user_id	String	Indicates the user ID.
user_name	String	Indicates the username.
access_user	String	Indicates the username of an instance.
order_id	String	Indicates the order ID.
maintain_begin	String	Indicates the time at which a maintenance time window starts. Format: HH:mm:ss
maintain_end	String	Indicates the time at which a maintenance time window ends. Format: HH:mm:ss
enable_publicip	Boolean	Indicates whether to enable public access for an instance. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>
management_connect_address	String	Indicates the connection address of the Kafka Manager of a Kafka instance.

Parameter	Type	Description
ssl_enable	Boolean	Indicates whether to enable security authentication. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>
enterprise_project_id	String	Indicates the enterprise project ID.
is_logical_volume	Boolean	Distinguishes old instances from new instances during instance capacity expansion. <ul style="list-style-type: none"> <li>• <b>true</b>: New instance, which allows dynamic disk capacity expansion without restarting the instance.</li> <li>• <b>false</b>: Old instance.</li> </ul>
extend_times	Integer	Indicates the number of disk expansion times. If it exceeds 20, the disk cannot be expanded.
enable_auto_topic	Boolean	Indicates whether automatic topic creation is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: enabled</li> <li>• <b>false</b>: disabled</li> </ul>
total_storage_space	Integer	Indicates the message storage space. Unit: GB
storage_resource_id	String	Indicates the storage resource ID.
storage_spec_code	String	Indicates the I/O specification.
service_type	String	Indicates the service type.
storage_type	String	Indicates the storage type.
retention_policy	String	Indicates the message retention policy.
kafka_public_status	String	Indicates whether Kafka public access is enabled.
public_bandwidth	Integer	Indicates the public network bandwidth.
public_connect_address	String	Indicates the instance IP address for public access. This parameter is displayed only when public access is enabled.
kafka_manager_user	String	Indicates the username for logging in to Kafka Manager.
enable_log_collection	Boolean	Indicates whether log collection is enabled.

Parameter	Type	Description
cross_vpc_info	String	Indicates cross-VPC access information.
ipv6_enable	Boolean	Indicates whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	Indicates the IPv6 connection address.
rest_enable	Boolean	Indicates whether the Kafka REST function is enabled.
rest_connect_address	String	Indicates the Kafka REST connection address.
message_query_inst_enable	Boolean	Indicates whether message query is enabled.
vpc_client_plain	Boolean	Indicates whether intra-VPC plaintext access is enabled.
support_features	String	Indicates the list of features supported by the Kafka instance.
trace_enable	Boolean	Indicates whether message tracing is enabled.
pod_connect_address	String	Indicates the connection address on the tenant side.
disk_encrypted	Boolean	Indicates whether disk encryption is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: enabled</li> <li>• <b>false</b>: disabled</li> </ul>
kafka_private_connect_address	String	Indicates the private connection address of a Kafka instance.
ces_version	String	Indicates the Cloud Eye version.
tags	Array<Object>	Indicates the list of tags.

**Table 7-8** tags

Parameter	Type	Description
key	String	Indicates the tag key.
value	String	Indicates the tag value.

**Example response**

```
{
  "name": "kafka-l00230526",
  "engine": "kafka",
  "port": 9092,
```

```
"status": "RUNNING",
"type": "cluster",
"specification": "100MB",
"engine_version": "XXX",
"connect_address": "192.168.1.116,192.168.1.152,192.168.1.78",
"connect_dn": "",
"instance_id": "ef84dd5f-3ece-4336-8c99-987defd62e3a",
"resource_spec_code": "dms.instance.kafka.cluster.c3.mini",
"charging_mode": 1,
"vpc_id": "2477879f-aebf-496f-a08a-67812885ce9b",
"vpc_name": "vpc-y00502467",
"created_at": "1568797295209",
"product_id": "00300-30308-0--0",
"security_group_id": "008a08e2-10cc-4d9b-90ab-3f3b8f6c3333",
"security_group_name": "z00417080-cce-node-na7j",
"subnet_id": "5ca08fb7-7522-4d95-9fa5-ff6b3592a29d",
"subnet_name": "subnet-cyd-6102",
"subnet_cidr": "192.168.1.0/24",
"available_zones": [
  "ae04cf9d61544df3806a3feeb401b204"
],
"user_id": "2b4af4428ec840dfa1f0f1a32e965567",
"user_name": "laiyh",
"kafka_manager_user": "root",
"maintain_begin": "22:00:00",
"maintain_end": "02:00:00",
"storage_space": 492,
"total_storage_space": 600,
"used_storage_space": 25,
"partition_num": "300",
"ssl_enable": false,
"management_connect_address": "https://192.168.1.116:9999",
"storage_resource_id": "81982562-ce8b-490a-95fa-2b225c292271",
"storage_spec_code": "dms.physical.storage.ultra",
"service_type": "advanced",
"storage_type": "hec",
"enterprise_project_id": "0",
"is_logical_volume": true,
"extend_times": 0,
"retention_policy": "produce_reject",
"ipv6_enable": false,
"ipv6_connect_addresses": [],
"connector_enable": false,
"connector_id": "",
"rest_enable": false,
"rest_connect_address": "",
"message_query_inst_enable": true,
"vpc_client_plain": false,
"support_features":
"feature.physerver.kafka.topic.accesspolicy,message_trace_enable,features.pod.token.access,feature.physerver.
kafka.pulbic.dynamic,feature.physerver.kafka.user.manager",
"trace_enable": false,
"agent_enable": false,
"pod_connect_address": "100.113.16.105:9100,100.113.5.197:9100,100.113.15.231:9100",
"disk_encrypted": false,
"enable_auto_topic": true
}
```

## Status Code

**Table 7-9** describes the status code of successful operations. For details about other status codes, see [Status Code](#).



**Table 7-9** Status code

Status Code	Description
200	Specified instance queried successfully.

### 7.1.1.3 Modifying an Instance

 NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Modifying Instance Information](#).

#### Function

This API is used to modify the instance information, including the instance name, description, maintenance window, and security group.

#### URI

PUT /v1.0/{project\_id}/instances/{instance\_id}

**Table 7-10** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
instance_id	String	Yes	Indicates the instance ID.

#### Request

##### Request parameters

[Table 7-11](#) describes the parameters.

**Table 7-11** Request parameters

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

Parameter	Type	Mandatory	Description
description	String	No	<p>Indicates the description of an instance. It is a character string containing not more than 1024 characters.</p> <p><b>NOTE</b> The backslash (\) and quotation mark (") are special characters for JSON packets. When using these characters in a parameter value, add the escape character (\) before these characters, for example, \\ and \".</p>
maintain_begin	String	No	<p>Indicates the time at which a maintenance time window starts.</p> <p>Format: HH:mm:ss</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details about how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Windows</a>.</li> <li>The start time must be set to 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_begin</b> is left blank, parameter <b>maintain_end</b> is also left blank. In this case, the system automatically sets the start time to 02:00:00.</li> </ul>

Parameter	Type	Mandatory	Description
maintain_end	String	No	<p>Indicates the time at which a maintenance time window ends.</p> <p>Format: HH:mm:ss</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details about how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Windows</a>.</li> <li>The end time is four hours later than the start time. For example, if the start time is 22:00:00, the end time is 02:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_end</b> is left blank, parameter <b>maintain_start</b> is also left blank. In this case, the system automatically sets the end time to 06:00:00.</li> </ul>
security_group_id	String	No	Indicates the security group ID.
retention_policy	String	No	<p>Indicates the capacity threshold policy.</p> <p>Options:</p> <ul style="list-style-type: none"> <li><b>produce_reject</b>: New messages cannot be created.</li> <li><b>time_base</b>: The earliest messages are deleted.</li> </ul>
enterprise_project_id	String	No	Indicates the enterprise project ID.

### Example request

Example 1:

```
PUT https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}
{
  "name": "dms002",
  "description": "instance description"
}
```

Example 2:

```
PUT https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}
{
  "name": "dms002",
  "description": "instance description",
  "maintain_begin": "02:00:00",
  "maintain_end": "06:00:00"
}
```

## Response

### Response parameters

None.

### Example response

None.

## Status Code

**Table 7-12** describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-12** Status code

Status Code	Description
204	The instance is modified successfully.

### 7.1.1.4 Deleting an Instance

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Deleting an Instance](#).

## Function

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

## URI

DELETE /v1.0/{project\_id}/instances/{instance\_id}

**Table 7-13** describes the parameters.

**Table 7-13** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.

Parameter	Type	Mandatory	Description
instance_id	String	Yes	Indicates the instance ID.

## Request

### Request parameters

None.

### Example request

```
DELETE https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}
```

## Response

### Response parameters

None.

### Example response

None.

## Status Code

**Table 7-14** describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-14** Status code

Status Code	Description
204	The instance is deleted successfully.

### 7.1.1.5 Restarting or Deleting Instances in Batches

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Batch Restarting or Deleting Instances](#).

## Function

This API is used to restart or delete instances in batches.

When an instance is being restarted, message retrieval and creation requests of the client will be rejected.

Deleting an instance will delete the data in the instance without any backup. Exercise caution when performing this operation.

## URI

POST /v1.0/{project\_id}/instances/action

[Table 7-15](#) describes the parameters.

**Table 7-15** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.

## Request

### Request parameters

[Table 7-16](#) describes the parameters.

**Table 7-16** Request parameters

Parameter	Type	Mandatory	Description
action	String	Yes	Indicates the operation to be performed on instances. The value of this parameter can be <b>restart</b> or <b>delete</b> .
instances	Array	No	Indicates the list of instance IDs.
allFailure	String	No	When set to <b>kafka</b> , indicates all Kafka instances that fail to be created are to be deleted.

### Example request

Restarting instances in batches:

```
POST https://{dms_endpoint}/v1.0/{project_id}/instances/action
{
  "action": "restart",
  "instances": ["54602a9d-5e22-4239-9123-77e350df4a34", "7166cdea-dbad-4d79-9610-7163e6f8b640"]
}
```

Deleting instances in batches:

```
POST https://{dms_endpoint}/v1.0/{project_id}/instances/action
{
  "action": "delete",
  "instances": ["54602a9d-5e22-4239-9123-77e350df4a34", "7166cdea-dbad-4d79-9610-7163e6f8b640"]
}
```

Deleting all instances that fail to be created:

```
POST https://{dms_endpoint}/v1.0/{project_id}/instances/action
{
```

```
"action" : "delete",
"allFailure" : "kafka"
}
```

## Response

### Response parameters

When **action** is set to **delete**, **allFailure** is set to **kafka**, and an empty response is returned, the instances are deleted successfully. [Table 7-17](#) describes the parameters.

**Table 7-17** Response parameters

Parameter	Type	Description
results	Array	Indicates the result of instance modification.

**Table 7-18** results parameter description

Parameter	Type	Description
instance	String	Indicates the instance ID.
result	String	Indicates an operation result, which can be <b>success</b> or <b>failed</b>

### Example response

```
{
  "results": [
    {
      "result": "success",
      "instance": "afc90a2a-a02c-4cba-94d5-58dfa9ad1e0d"
    },
    {
      "result": "success",
      "instance": "67fc5f8d-3986-4f02-bb75-4075a23112de"
    }
  ]
}
```

## Status Code

[Table 7-19](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-19** Status code

Status Code	Description
200	The instances are restarted or deleted successfully.
204	Successfully deleting an instance failed to be created.

### 7.1.1.6 Querying All Instances

 **NOTE**

This API is out-of-date and may not be maintained in the future. Please use the API described in [Listing All Instances](#).

#### Function

This API is used to query the instances of a tenant by set conditions.

#### URI

GET /v1.0/{project\_id}/instances?  
engine={engine}&name={name}&status={status}&id={id}&includeFailure={includeFailure}&exactMatchName={exactMatchName}&enterprise\_project\_id={enterprise\_project\_id}

[Table 7-20](#) describes the parameters.

**Table 7-20** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
engine	String	No	Indicates the message engine. Value: <b>kafka</b>
name	String	No	Indicates the instance name.
id	String	No	Indicates the instance ID.
status	String	No	Indicates the instance status. For details, see <a href="#">Instance Status</a> .
includeFailure	String	No	Indicates whether to return the number of instances that fail to be created. If the value is <b>true</b> , the number of instances that failed to be created is returned. If the value is not <b>true</b> , the number is not returned.



Parameter	Type	Mandatory	Description
exactMatchName	String	No	Indicates whether to search for the instance that precisely matches a specified instance name.  The default value is <b>false</b> , indicating that a fuzzy search is performed based on a specified instance name. If the value is <b>true</b> , the instance that precisely matches a specified instance name is queried.
enterprise_project_id	String	No	Indicates the enterprise project ID.

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/{project_id}/instances?
start=1&limit=10&name=&status=&id=&includeFailure=true&exactMatchName=false
```

## Response

### Response parameters

[Table 7-21](#) describes the parameters.

**Table 7-21** Response parameters

Parameter	Type	Description
instances	Array	Indicates instance details.
instance_num	Integer	Indicates the number of instances.

**Table 7-22** instance parameter description

Parameter	Type	Description
name	String	Indicates the instance name.
engine	String	Indicates the message engine.
engine_version	String	Indicates the engine version.

Parameter	Type	Description
specification	String	Indicates the specifications of an instance.
storage_space	Integer	Indicates the message storage space. Unit: GB
partition_num	String	Indicates the maximum number of topics in a Kafka instance.
used_storage_space	Integer	Indicates the used message storage space. Unit: GB
connect_addresses	String	Indicates the IP address of an instance.
port	Integer	Indicates the port number of an instance.
status	String	Indicates the status of an instance. For details, see <a href="#">Instance Status</a> .
instance_id	String	Indicates the instance ID.
resource_spec_code	String	Indicates the resource specifications identifier. <ul style="list-style-type: none"> <li><b>dms.instance.kafka.cluster.c3.mini:</b> Kafka instance, 100 MB/s reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.small.2:</b> Kafka instance, 300 MB/s reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.middle.2:</b> Kafka instance, 600 MB reference bandwidth</li> <li><b>dms.instance.kafka.cluster.c3.high.2:</b> Kafka instance, 1200 MB reference bandwidth</li> </ul>
charging_mode	Integer	Billing mode.
vpc_id	String	Indicates the ID of a VPC.
vpc_name	String	Indicates the name of a VPC.
created_at	String	Indicates the time when an instance is created. 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.
user_id	String	Indicates the user ID.
user_name	String	Indicates the username.
order_id	String	Indicates the order ID.
maintain_begin	String	Indicates the time at which a maintenance time window starts. Format: HH:mm:ss

Parameter	Type	Description
maintain_end	String	Time at which the maintenance time window ends. Format: HH:mm:ss
enable_publicip	Boolean	Indicates whether to enable public access for an instance. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>
management_connect_address	String	Indicates the connection address of the Kafka Manager of a Kafka instance.
ssl_enable	Boolean	Indicates whether to enable security authentication. <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul>
enterprise_project_id	String	Indicates the enterprise project ID.
is_logical_volume	Boolean	Distinguishes old instances from new instances during instance capacity expansion. <ul style="list-style-type: none"> <li>• <b>true</b>: New instance, which allows dynamic disk capacity expansion without restarting the instance.</li> <li>• <b>false</b>: Old instance.</li> </ul>
extend_times	Integer	Indicates the number of disk expansion times. If it exceeds 20, the disk cannot be expanded.
enable_auto_topic	Boolean	Indicates whether automatic topic creation is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: enabled</li> <li>• <b>false</b>: disabled</li> </ul>
type	String	Indicates the instance type. Value: <b>cluster</b> .
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.
available_zones	Array	Indicates the AZ to which the instance node belongs. The AZ ID is returned.
total_storage_space	Integer	Indicates the message storage space. Unit: GB

Parameter	Type	Description
public_connect_address	String	Indicates the instance IP address for public access. This parameter is displayed only when public access is enabled.
storage_resource_id	String	Indicates the storage resource ID.
storage_spec_code	String	Indicates the I/O specification.
service_type	String	Indicates the service type.
storage_type	String	Indicates the storage type.
retention_policy	String	Indicates the message retention policy.
kafka_public_status	String	Indicates whether Kafka public access is enabled.
public_bandwidth	Integer	Indicates the public network bandwidth.
kafka_manager_user	String	Indicates the username for logging in to Kafka Manager.
enable_log_collection	Boolean	Indicates whether log collection is enabled.
cross_vpc_info	String	Indicates cross-VPC access information.
ipv6_enable	Boolean	Indicates whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	Indicates the IPv6 connection address.
rest_enable	Boolean	Indicates whether the Kafka REST function is enabled.
rest_connect_address	String	Indicates the Kafka REST address.
message_query_inst_enable	Boolean	Indicates whether message query is enabled.
vpc_client_plain	Boolean	Indicates whether intra-VPC plaintext access is enabled.
support_features	String	Indicates the list of features supported by the Kafka instance.
trace_enable	Boolean	Indicates whether message tracing is enabled.
pod_connect_address	String	Indicates the connection address on the tenant side.
disk_encrypted	Boolean	Indicates whether disk encryption is enabled.

Parameter	Type	Description
kafka_private_connect_address	String	Indicates the private connection address of a Kafka instance.
ces_version	String	Indicates the Cloud Eye version.
tags	Array<Object>	Indicates the list of tags.

**Table 7-23** tags

Parameter	Type	Description
key	String	Indicates the tag key.
value	String	Indicates the tag value.

### Example response

```
{
  "instances": [
    {
      "name": "kafka-l00230526",
      "engine": "kafka",
      "port": 9092,
      "status": "RUNNING",
      "type": "cluster",
      "specification": "100MB",
      "engine_version": "XXX",
      "connect_address": "192.168.1.116,192.168.1.152,192.168.1.78",
      "instance_id": "ef84dd5f-3ece-4336-8c99-987defd62e3a",
      "resource_spec_code": "dms.instance.kafka.cluster.c3.mini",
      "charging_mode": 1,
      "vpc_id": "2477879f-aebf-496f-a08a-67812885ce9b",
      "vpc_name": "vpc-y00502467",
      "created_at": "1568797295209",
      "product_id": "00300-30308-0--0",
      "security_group_id": "008a08e2-10cc-4d9b-90ab-3f3b8f6c3333",
      "security_group_name": "z00417080-cce-node-na7j",
      "subnet_id": "5ca08fb7-7522-4d95-9fa5-ff6b3592a29d",
      "available_zones": [
        "ae04cf9d61544df3806a3feeb401b204"
      ],
      "user_id": "2b4af4428ec840dfa1f0f1a32e965567",
      "user_name": "laiyh",
      "kafka_manager_user": "root",
      "maintain_begin": "22:00",
      "maintain_end": "02:00",
      "storage_space": 492,
      "total_storage_space": 600,
      "used_storage_space": 25,
      "partition_num": "300",
      "ssl_enable": false,
      "management_connect_address": "https://192.168.1.116:9999",
      "storage_resource_id": "81982562-ce8b-490a-95fa-2b225c292271",
      "storage_spec_code": "dms.physical.storage.ultra",
      "service_type": "advanced",
      "storage_type": "hec",
      "enterprise_project_id": "0",
      "is_logical_volume": true,
    }
  ]
}
```

```

    "extend_times": 0,
    "retention_policy": "produce_reject",
    "ipv6_enable": false,
    "ipv6_connect_addresses": [],
    "rest_enable": false,
    "rest_connect_address": "",
    "message_query_inst_enable": true,
    "vpc_client_plain": false,
    "support_features":
"feature.physerver.kafka.topic.accesspolicy,message_trace_enable,features.pod.token.access,feature.physerver.
kafka.pulbic.dynamic,feature.physerver.kafka.user.manager",
    "trace_enable": false,
    "agent_enable": false,
    "pod_connect_address": "100.113.16.105:9100,100.113.5.197:9100,100.113.15.231:9100",
    "disk_encrypted": false,
    "enable_auto_topic": true
  }
],
  "instance_num": 1
}

```

## Status Code

[Table 7-24](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-24** Status code

Status Code	Description
200	All instances are queried successfully.

### 7.1.1.7 Creating a Topic in a Kafka Instance

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Creating a Topic for a Kafka Instance](#).

## Function

This API is used to create a topic in a Kafka instance.

## URI

POST /v1.0/{project\_id}/instances/{instance\_id}/topics

[Table 7-25](#) describes the parameters.

**Table 7-25** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.

Parameter	Type	Mandatory	Description
instance_id	String	Yes	Indicates the instance ID.

## Request

### Request parameters

[Table 7-26](#) describes the parameter.

**Table 7-26** Request parameters

Parameter	Type	Mandatory	Description
id	String	Yes	Indicates the name of a topic. A topic name consists of 4 to 64 characters, starts with a letter, and contains only letters, hyphens (-), underscores (_), and digits.
partition	Integer	No	Indicates the number of topic partitions, which is used to set the number of concurrently consumed messages. Value range: 1–100. Default value: <b>3</b> .
replication	Integer	No	Indicates the number of replicas, which is configured to ensure data reliability. Value range: 1–3. Default value: <b>3</b> .
sync_replication	Boolean	No	Indicates whether to enable synchronous replication. After this function is enabled, the <b>acks</b> parameter on the producer client must be set to <b>-1</b> . Otherwise, this parameter does not take effect. By default, synchronous replication is disabled.
retention_time	Integer	No	Indicates the retention period of a message. Its default value is <b>72</b> . Value range: 1–168. Unit: hour.
sync_message_flush	Boolean	No	Indicates whether to enable synchronous flushing. Default value: <b>false</b> . Synchronous flushing compromises performance.

### Example request

```
POST https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}/topics
{
  "id" : "haha",
  "partition" : 3,
  "replication" : 3,
  "sync_replication" : true,
  "retention_time" : 10,
  "sync_message_flush" : true
}
```

## Response

### Response parameters

[Table 7-27](#) describes the parameter.

**Table 7-27** Response parameters

Parameter	Type	Description
id	String	Indicates the name of a topic.

### Example response

```
{
  "id": "haha"
}
```

## Status Code

[Table 7-28](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-28** Status code

Status Code	Description
200	The topic is created successfully.

### 7.1.1.8 Querying a Topic in a Kafka Instance

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Listing Topics of a Kafka Instance](#).

## Function

This API is used to query details about a topic in a Kafka instance.

## URI

GET /v1.0/{project\_id}/instances/{instance\_id}/topics



**Table 7-29** describes the parameter.

**Table 7-29** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
instance_id	String	Yes	Indicates the instance ID.

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}/topics
```

## Response

### Response parameters

**Table 7-30** describes the response parameter.

**Table 7-30** Response parameter

Parameter	Type	Description
total	Integer	Indicates the total number of topics.
size	Integer	Indicates the maximum number of records to be displayed on a page.
remain_partitions	Integer	Indicates the number of remaining partitions.
max_partitions	Integer	Indicates the total number of partitions.
topics	Array	Indicates the list of topics.

**Table 7-31** Parameter description

Parameter	Type	Description
policiesOnly	Boolean	Whether this policy is the default policy.
id	String	Indicates the topic name.

Parameter	Type	Description
replication	Integer	Indicates the number of replicas, which is configured to ensure data reliability.
partition	Integer	Indicates the number of topic partitions, which is used to set the number of concurrently consumed messages.
retention_time	Integer	Indicates the retention period of a message.
sync_replication	Boolean	Indicates whether to enable synchronous replication. After this function is enabled, the <b>acks</b> parameter on the producer client must be set to <b>-1</b> . Otherwise, this parameter does not take effect. By default, synchronous replication is disabled.
sync_message_flush	Boolean	Indicates whether to enable synchronous flushing. Synchronous flushing compromises performance.
external_configs	Object	Indicates the extended configuration.
topic_type	Integer	Indicates the topic type.

### Example response

```
{
  "count": 1,
  "topics": [
    {
      "id": "topic-test",
      "replication": 3,
      "partition": 4,
      "retention_time": 72,
      "sync_replication": "false",
      "sync_message_flush": "false"
    }
  ]
}
```

## Status Code

[Table 7-32](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-32** Status code

Status Code	Description
200	The information is queried successfully.

### 7.1.1.9 Deleting Topics in a Kafka Instance in Batches

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Batch Deleting Topics of a Kafka Instance](#).

## Function

This API is used to delete topics in a Kafka instance in batches.

## URI

POST /v1.0/{project\_id}/instances/{instance\_id}/topics/delete

[Table 7-33](#) describes the parameter.

**Table 7-33** Parameters

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
instance_id	String	Yes	Indicates the instance ID.

## Request

### Request parameters

[Table 7-34](#) describes the parameter.

**Table 7-34** Request parameter

Parameter	Type	Mandatory	Description
topics	Array	Yes	Indicates the list of topics to be deleted.

### Example request

```
POST https://{dms_endpoint}/v1.0/{project_id}/instances/{instance_id}/topics/delete
{
  "topics": ["hah", "aabb"]
}
```

## Response

### Response parameters

**Table 7-35** describes the parameter.

**Table 7-35** Response parameters

Parameter	Type	Description
topics	Array	Indicates the list of topics.

**Table 7-36** topics parameter description

Parameter	Type	Description
id	String	Indicates the topic name.
success	Boolean	Indicates whether the topics are deleted.

### Example response

```
{
  "topics": [{
    "id": "haha",
    "success": true
  }, {
    "id": "aabb",
    "success": true
  }
]
```

## Status Code

**Table 7-37** describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-37** Status code

Status Code	Description
200	The topics are successfully deleted.

## 7.1.2 Other APIs

### 7.1.2.1 Querying AZ Information

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Listing AZ Information](#).

## Function

This API is used to query the AZ ID.

## URI

GET /v1.0/availableZones

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/availableZones
```

## Response

### Response parameters

[Table 7-38](#) and [Table 7-39](#) describe the parameters.

**Table 7-38** Response parameters

Parameter	Type	Description
region_id	String	Indicates the region ID.
available_zones	Array	Indicates details of AZs. For details, see <a href="#">Table 7-39</a> .

**Table 7-39** available\_zones parameter description

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. <ul style="list-style-type: none"> <li><b>true:</b> The AZ has available resources.</li> <li><b>false:</b> Resources of the AZ have been sold out.</li> </ul>

### Example response

```
{
  regionId: "XXXX",
  available_zones:[
    {
      "id":"1d7b939b382c4c3bb3481a8ca10da768",
      "name":"az10.dc1",
      "code":"az10.dc1",
      "port":"8002",
      "resource_availability": "true"
    },
    {
      "id":"1d7b939b382c4c3bb3481a8ca10da769",
      "name":"az10.dc2",
      "code":"az10.dc2",
      "port":"8002",
      "resource_availability": "true"
    }
  ]
}
```

## Status Code

**Table 7-40** describes the status code of successful operations. For details about other status codes, see **Status Code**.

**Table 7-40** Status code

Status Code	Description
200	The AZ information is successfully queried.

### 7.1.2.2 Querying Product Specifications

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in **Querying Product Specifications**.

## Function

This API is used to query the product specifications to configure the product ID.

## URI

GET /v1.0/products?engine={engine}

**Table 7-41** describes the parameter.

**Table 7-41** Parameters

Parameter	Type	Mandatory	Description
engine	String	Yes	Indicates the message engine.

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/products?engine={engine}
```

## Response

### Response parameters

[Table 7-43](#) describes the response parameters.

**Table 7-42** Parameters

Parameter	Type	Description
Hourly	Array	Indicates the list of pay-per-use products.
Monthly	Array	Indicates the list of products in yearly/monthly billing mode. Currently, you cannot create yearly/monthly Kafka instances by calling an API.

**Table 7-43** Parameters

Parameter	Type	Description
name	String	Indicates the message engine, which is <b>kafka</b> .
version	String	Indicates the version of the message engine. Currently, only 1.1.0 and 2.3.0 are supported.
values	Array	Indicates product specifications. For details, see <a href="#">Table 7-44</a> .

**Table 7-44** values parameter description

Parameter	Type	Description
detail	Array	Indicates the details of specifications. For details, see <a href="#">Table 7-45</a> .
name	String	Indicates the instance type.
unavailable_zones	Array	Indicates AZs where resources are sold out.
available_zones	Array	Indicates AZs where there are available resources.

**Table 7-45** detail parameter description

Parameter	Type	Description
tps	String	Indicates the maximum number of messages per unit time.
storage	String	Indicates the message storage space.
partition_num	String	Indicates the maximum number of topics in a Kafka instance.
product_id	String	Indicates the product ID.
spec_code	String	Indicates the specification ID.
io	Array	Indicates the I/O information. For details, see <a href="#">Table 7-46</a> .
bandwidth	String	Indicates the bandwidth of a Kafka instance.
available_zones	Array	Indicates AZs where there are available resources.
ecs_flavor_id	String	Indicates the flavors of the corresponding ECS.
arch_type	String	Indicates the instance architecture type. Currently, only x86 is supported.

**Table 7-46** io parameter description

Parameter	Type	Description
io_type	String	Indicates the I/O type.
storage_spec_code	String	Indicates the I/O specification.
available_zones	Array	Indicates AZs where there are available I/O resources.
unavailable_zones	Array of strings	Indicates AZs where I/O resources are sold out.
volume_type	String	Indicates the disk type.

### Example response

```
{
  "Hourly": [{
    "name": "kafka",
    "version": "XXX",
    "values": [{
      "detail": [{
        "tps": "50000",
        "storage": "600",
        "partition_num": "300",
```



```

"product_id": "00300-30308-0--0",
"spec_code": "dms.instance.kafka.cluster.c3.mini",
"io": [{
  "io_type": "high",
  "storage_spec_code": "dms.physical.storage.high",
  "volume_type": "SAS"
}],
{
  "io_type": "ultra",
  "storage_spec_code": "dms.physical.storage.ultra",
  "volume_type": "SSD"
}],
"bandwidth": "100MB",
"unavailable_zones": [],
"ecs_flavor_id": "c3.large.2"
},
{
  "tps": "100000",
  "storage": "1200",
  "partition_num": "900",
  "product_id": "00300-30310-0--0",
  "spec_code": "dms.instance.kafka.cluster.c3.small.2",
  "io": [{
    "io_type": "high",
    "storage_spec_code": "dms.physical.storage.high",
    "volume_type": "SAS"
  }],
  {
    "io_type": "ultra",
    "storage_spec_code": "dms.physical.storage.ultra",
    "volume_type": "SSD"
  }],
  "bandwidth": "300MB",
  "unavailable_zones": [],
  "ecs_flavor_id": "c3.xlarge.2"
},
{
  "tps": "200000",
  "storage": "2400",
  "partition_num": "1800",
  "product_id": "00300-30312-0--0",
  "spec_code": "dms.instance.kafka.cluster.c3.middle.2",
  "io": [{
    "io_type": "ultra",
    "storage_spec_code": "dms.physical.storage.ultra",
    "volume_type": "SSD"
  }],
  "bandwidth": "600MB",
  "unavailable_zones": [],
  "ecs_flavor_id": "c3.2xlarge.2"
},
{
  "tps": "300000",
  "storage": "4800",
  "partition_num": "1800",
  "product_id": "00300-30314-0--0",
  "spec_code": "dms.instance.kafka.cluster.c3.high.2",
  "io": [{
    "io_type": "ultra",
    "storage_spec_code": "dms.physical.storage.ultra",
    "volume_type": "SSD"
  }],
  "bandwidth": "1200MB",
  "unavailable_zones": [],
  "ecs_flavor_id": "c3ne.2xlarge.2"
}],
"name": "cluster",
"unavailable_zones": []
}]

```

```

    }],
    "Monthly": [{
      "name": "kafka",
      "version": "XXX",
      "values": [{
        "detail": [{
          "tps": "50000",
          "storage": "600",
          "partition_num": "300",
          "product_id": "00300-30309-0--0",
          "spec_code": "dms.instance.kafka.cluster.c3.mini",
          "io": [{
            "io_type": "high",
            "storage_spec_code": "dms.physical.storage.high",
            "volume_type": "SAS"
          }],
        },
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra",
          "volume_type": "SSD"
        }],
        "bandwidth": "100MB",
        "unavailable_zones": [],
        "ecs_flavor_id": "c3.large.2"
      }],
      {
        "tps": "100000",
        "storage": "1200",
        "partition_num": "900",
        "product_id": "00300-30311-0--0",
        "spec_code": "dms.instance.kafka.cluster.c3.small.2",
        "io": [{
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high",
          "volume_type": "SAS"
        }],
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra",
          "volume_type": "SSD"
        }],
        "bandwidth": "300MB",
        "unavailable_zones": [],
        "ecs_flavor_id": "c3.xlarge.2"
      }],
      {
        "tps": "200000",
        "storage": "2400",
        "partition_num": "1800",
        "product_id": "00300-30313-0--0",
        "spec_code": "dms.instance.kafka.cluster.c3.middle.2",
        "io": [{
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra",
          "volume_type": "SSD"
        }],
        "bandwidth": "600MB",
        "unavailable_zones": [],
        "ecs_flavor_id": "c3.2xlarge.2"
      }],
      {
        "tps": "300000",
        "storage": "4800",
        "partition_num": "1800",
        "product_id": "00300-30315-0--0",
        "spec_code": "dms.instance.kafka.cluster.c3.high.2",
        "io": [{
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra",

```

```

        "volume_type": "SSD"
      },
      "bandwidth": "1200MB",
      "unavailable_zones": [],
      "ecs_flavor_id": "c3ne.2xlarge.2"
    },
    "name": "cluster",
    "unavailable_zones": []
  }
}

```

## Status Code

[Table 7-47](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-47** Status code

Status Code	Description
200	Product specifications queried successfully.

### 7.1.2.3 Querying Maintenance Time Windows

#### NOTE

This API is out-of-date and may not be maintained in the future. Please use the API described in [Listing Maintenance Time Windows](#).

## Function

This API is used to query the start and end time of the maintenance window.

## URI

GET /v1.0/instances/maintain-windows

## Request

### Request parameters

None.

### Example request

```
GET https://{dms_endpoint}/v1.0/instances/maintain-windows
```

## Response

### Response parameters

[Table 7-48](#) and [Table 7-49](#) describe the response parameters.

**Table 7-48** Response parameters

Parameter	Type	Description
maintain_windows	Array	Indicates a list of supported maintenance time windows.

**Table 7-49** maintain\_windows parameter description

Parameter	Type	Description
seq	Integer	Indicates the sequential number of a maintenance time window.
begin	String	Indicates the time at which a maintenance time window starts.
end	String	Indicates the time at which a maintenance time window ends.
default	Boolean	Indicates whether a maintenance time window is set to the default time segment.

### Example response

```
{
  "maintain_windows": [{
    "default": false,
    "seq": 1,
    "begin": "22:00:00",
    "end": "02:00:00"
  },
  {
    "default": true,
    "seq": 2,
    "begin": "02:00:00",
    "end": "06:00:00"
  },
  {
    "default": false,
    "seq": 3,
    "begin": "06:00:00",
    "end": "10:00:00"
  },
  {
    "default": false,
    "seq": 4,
    "begin": "10:00:00",
    "end": "14:00:00"
  },
  {
    "default": false,
    "seq": 5,
    "begin": "14:00:00",
    "end": "18:00:00"
  },
  {
    "default": false,
```

```
"seq": 6,  
  "begin": "18:00:00",  
  "end": "22:00:00"  
}]  
}
```

## Status Code

[Table 7-50](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

**Table 7-50** Status code

Status Code	Description
200	The maintenance time windows are queried successfully.

# 8 Appendix

## 8.1 Status Code

[Table 8-1](#) lists status codes.

**Table 8-1** 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.  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. 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. The client should modify the request instead of re-initiating it.
404	NotFound	The requested resource cannot be found. 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. 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. 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. 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.

## 8.2 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.00400012	The password does not meet the complexity requirements. An instance password must: Be a string consisting of 8 to 32 characters. Contain at least two of the following character types: Lowercase letters Uppercase letters Digits Special characters `~!@#\$%^&*()-_+=\ [{ }:; ',<.>/?	The password does not meet the complexity requirements. A password: - Can contain 8 to 32 characters. - Must contain at least three of the following character types: letters, digits, and special characters `~!@#\$%^&*()-_+=\ [{ }:; ',<.>/? - Cannot be a weak password.	Check whether the password meets the requirements.
400	DMS.00400013	vpc_id in the request is empty.	Request parameter vpc_id is empty.	Check the vpc_id parameter.
400	DMS.00400014	security_group_id in the request is empty.	Request parameter security_group_id is empty.	Check the security_group_id parameter.
400	DMS.00400015	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.

Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400016	subnet_id in the request is empty.	Request parameter subnet_id is empty.	Check the subnet_id parameter.
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.
400	DMS.00400081	Duplicate instance name.	The instance name already exists.	Check the instance name.

Status Code	Error Codes	Error Message	Description	Solution
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.
400	DMS.00400101	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.



Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400102	The number of partitions created for a Kafka topic must be within the range of 1-20.	The number of partitions created for a topic in a Kafka instance must be within the range of 1-20.	Check the number of partitions of the topic.
400	DMS.00400103	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.00400105	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.00400106	Invalid maintenance time window.	Invalid maintenance time window.	Check the maintenance time window parameter.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400142	The yearly/monthly charging function is not enabled.	The yearly/monthly charging function is not enabled.	Purchase an on-demand instance.
400	DMS.00400500	Invalid disk space.	Invalid disk space.	Check the disk space.
400	DMS.00400800	Duplicate topic name.Invalid request. You can create, delete, or query a topic only for a Kafka instance.Invalid parameter. Error information varies by scenario.	Invalid {0} in the request.	Check the instance.
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.00404033	Does not support extend rabbitMQ disk space.	The RabbitMQ disk space cannot be expanded.	Scale out the RabbitMQ cluster.
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.

Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10240005	The project ID format is invalid.	Invalid project ID.	Check the project ID format.
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.

Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10240016	The group ID format is invalid.	Invalid group ID.	Check the group ID.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.



Status Code	Error Codes	Error Message	Description	Solution
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. {Error description}	Check the request format.
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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. 10240311	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. 10240312	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. 00404001	The requested URL does not exist.	The requested URL does not exist.	Check the URL.
404	DMS. 00404022	This instance does not exist.	The instance does not exist.	Check whether the instance exists.
404	DMS. 10240401	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. 10240405	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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.00500017	Internal service error.	Internal service error.	Contact technical support.
500	DMS.00500024	Internal service error.	Internal service error.	Contact technical support.
500	DMS.00500025	Internal service error.	Internal service error.	Contact technical support.
500	DMS.00500041	Internal service error.	Internal service error.	Contact technical support.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.

## 8.3 Instance Status

Table 8-2 Instance status description

Status	Description
CREATING	The instance is being created.
CREATEFAILED	The instance fails to be 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.
EXTENDING	The instance specifications are being changed.
EXTENDEDFAILED	The instance specifications failed to be changed.
DELETING	The instance is being deleted.
DELETED	The instance has been deleted.
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> .
UPGRADING	The instance is being upgraded.
ROLLBACK	The instance is being rolled back.

## 8.4 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

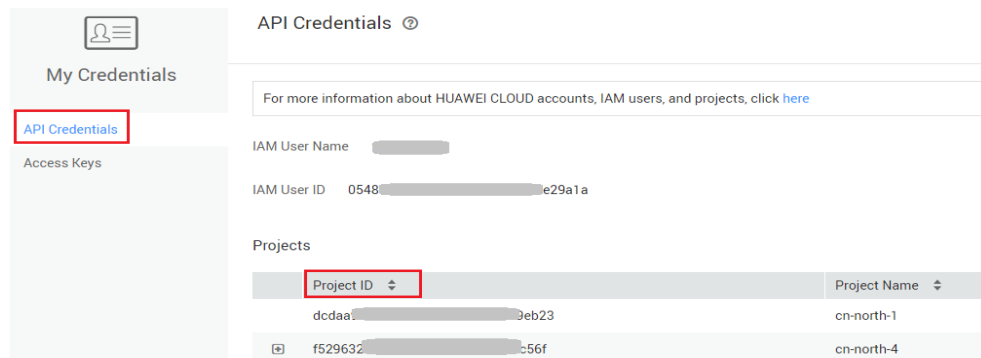
A project ID is required for some URLs when an API is called. You can obtain a project ID on the console.

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 8-1** Viewing a project ID



----End

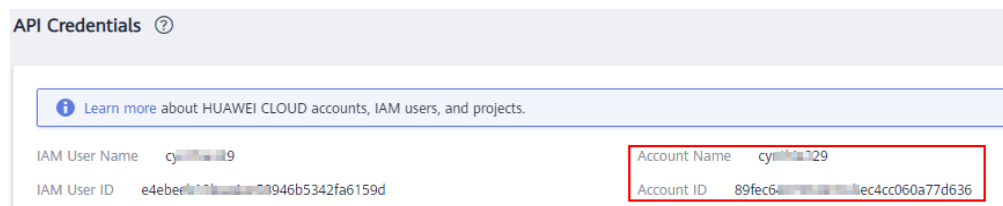
## 8.5 Obtaining the Account Name and Account ID

When calling APIs, you need to specify your domain name and domain ID in certain URLs. To do so, you need to obtain domain name and domain ID on the console first. The following procedure describes how to obtain the domain and domain ID:

1. Log in to the management console.
2. Hover the mouse pointer over the username in the upper right corner and choose **My Credentials** from the drop-down list.

Viewing the account name and account ID

**Figure 8-2** Viewing the domain name and domain ID



# A Change History

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Released On	Description
2022-08-30	This issue is the first official release.