



Distributed Message Service for RabbitMQ

API Reference

Date **2020-11-06**

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1 Before You Start

1.1 Overview

Welcome to *Distributed Message Service for RabbitMQ API Reference*. Distributed Message Service (DMS) for RabbitMQ is a message middleware service using the distributed, high-availability clustering technology. It provides reliable, scalable, and fully managed queues for sending, receiving, and storing messages.

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

NOTICE

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

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

1.2 API Calling

DMS 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 different services, see [Regions and Endpoints](#).

1.4 Constraints

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

1.5 Concepts

- Account
An account has full access permissions for all the resources and cloud services under the account. It can reset user passwords and grant users permissions. The account is a payment entity, which should not be used directly to perform routine management. To ensure account security, create IAM users and grant them permissions for routine management.
- IAM user
An IAM user is created by an account in IAM to use cloud services. Each IAM user has its own identity credentials (password and access keys).
API authentication requires information such as the account name, username, and password.
- 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.
- AZ: An AZ comprises of one or multiple physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Computing, network, storage, and other resources in an AZ are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to allow you to build cross-AZ high-availability systems.
- Project
A project corresponds to a region. Default projects are defined to a group and have physically isolated resources (including computing, storage, and network resources) across regions. Users can be granted permissions in a default project to access all resources in the region associated with the project. If you need more refined access control, create subprojects under a default project and purchase resources in subprojects. Then you can assign users the permissions required to access only the resources in the specific subprojects.
- Enterprise project
Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated from each other. An enterprise project can contain resources in multiple regions, and resources can be directly transferred between enterprise projects.

2 API Overview

Table 2-1 Instance management APIs

API	Description
Creating an Instance	Create a pay-per-use instance.
Querying an Instance	Query the details about a specified instance.
Modifying an Instance	Modify the name and description of an instance.
Deleting an Instance	Delete a specified instance and release all the resources occupied by it.
Restarting or Deleting Instances in Batches	Restart or delete multiples instances at one time.
Querying All Instances	Query the instances of a tenant by set conditions.
Querying AZ Information	Query AZ information.
Querying Product Specifications	Query product specifications.
Querying Maintenance Time Windows	Query maintenance time windows.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

- **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](#).
- **resource-path:**
Access path of an API for performing a specified operation. Obtain the value from the URI of the 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 a 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.

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 the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: requests a server resource header.
- **PATCH**: requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the API used to [obtain a user token](#), the request method is POST. The request is as follows:

```
POST https://iam.ae-ad-1.myhuaweicloud.com/v3/auth/tokens
```

Request Header

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

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, DMS APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature 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.ae-ad-1.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.

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

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

NOTE

The **scope** parameter specifies where a token takes effect. You can set the **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.cn-north-1.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-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it provides higher security than token 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 requests to get permissions for calling the API.

You can obtain a token by calling the API described in [Obtaining a User Token](#). DMS APIs can be called only by using a project-level token. To call the API used to [obtain a user token](#), set **auth.scope** to **project** in the request body as follows:

```
{
  "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.ae-ad-1.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 requests for authentication.

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

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.

3.3 Response

Status Code

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

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

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

Response Header

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

[Figure 3-1](#) shows the response header for the API of [obtaining a user token](#), in which **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-1 Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIITXQYJKoZIhvcNAQcCoIIYJCCEoCAQExDTALBgkqhkiG9w0BBwGgghacBIIWmHsidG9rZW4iOensiZXhwaXJlc19hdCI6ijlwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgkqO1wi4JlGzrpd18LGXK5tdfdq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHqJ82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FrucL6jaglfkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

(Optional) Response Body

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

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

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

```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

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

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

4 Getting Started

Scenarios

This section describes how to call an API to create a RabbitMQ 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](#).
- DMS endpoint obtained from [Regions and Endpoints](#).

Creating a RabbitMQ Instance

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

```
{
  "name": "rabbitmq-lxy001",
  "engine": "RabbitMQ",
  "engine_version": "3.7.17",
  "storage_space": 100,
  "access_user": "user",
  "password": "*****",
  "vpc_id": "1a28dcc5-c90d-421c-82bb-783f30f5b40a",
  "security_group_id": "0cc8fdb7-872a-49da-a062-88ccc39463b5",
  "subnet_id": "ebba7994-260d-42ab-bce1-39a08b365dc8",
  "available_zones": ["d573142f24894ef3bd3664de068b44b0"],
  "storage_spec_code": "dms.physical.storage.ultra",
  "product_id": "00300-30109-0--0"
}
```

- **name**: name of the instance
- **engine**: message engine. The value is **rabbitmq**.
- **engine_version**: version of the message engine. Currently, only version 3.7.17 is supported.
- **storage_space**: message storage space in GB. For details about the value range, see [Table 5-2](#).
- **access_user**: user-defined username for logging in to RabbitMQ

- **password**: user-defined password for logging in to RabbitMQ
- **vpc_id**: ID of the Virtual Private Cloud (VPC) where the instance resides. For details, see the *Virtual Private Cloud User Guide*.
- **security_group_id**: ID of the security group. For details, see the *Virtual Private Cloud User Guide*.
- **subnet_id**: ID of the VPC subnet. For details, see the *Virtual Private Cloud User Guide*.
- **available_zones**: ID of the AZ where the instance resides. The value cannot be empty or null. For details, see [Querying AZ Information](#).
- **product_id**: ID of the product. For details, see [Querying Product Specifications](#).
- **storage_spec_code**: storage I/O specification. For details about the value range, see [Table 5-2](#).

5 APIs for Managing Instances

5.1 Creating an Instance

Function

This API is used to create an instance.

URI

POST /v1.0/{project_id}/instances

[Table 5-1](#) describes the parameter.

Table 5-1 Parameter description

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

Request

Request parameters

[Table 5-2](#) describes the request parameters.

Table 5-2 Parameter description

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 supports only letters, digits, and hyphens (-).
description	String	No	Indicates the description of an instance. It is a character string containing not more than 1024 characters. NOTE 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. Value: rabbitmq
engine_version	String	No	Indicates the version of the message engine.
storage_space	Integer	Yes	Indicates the message storage space. Unit: GB <ul style="list-style-type: none"> Single-node RabbitMQ instance: 100–90,000 GB Cluster RabbitMQ instance: 100 GB x Number of nodes to 90,000 GB, 200 GB x Number of nodes to 90,000 GB, and 300 GB x Number of nodes to 90,000 GB
access_user	String	Yes	Indicates a username. A username consists of 4 to 64 characters and supports only letters, digits, and hyphens (-).
password	String	Yes	Indicates an instance password. An instance password must meet the following complexity requirements: <ul style="list-style-type: none"> Must be a string consisting of 8 to 32 characters. Must contain at least two of the following character types: <ul style="list-style-type: none"> Lowercase letters Uppercase letters Digits Special characters `~!@#%&*()-_+=\ [{]}:,;<.>/?

Parameter	Type	Mandatory	Description
vpc_id	String	Yes	Indicates the ID of a VPC.
security_group_id	String	Yes	Indicates the ID of a security group.
subnet_id	String	Yes	Indicates the ID of a subnet.
available_zones	Array	Yes	Indicates the ID of an AZ. The parameter value cannot be empty or null. For details, see Querying AZ Information .
product_id	String	Yes	Indicates the product ID. For details, see Querying Product Specifications .
maintain_begin	String	No	Indicates the time at which a maintenance time window starts. Format: HH:mm. <ul style="list-style-type: none"> 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 Querying Maintenance Time Windows. The start time must be set to 22:00, 02:00, 06:00, 10:00, 14:00, or 18:00. Parameters maintain_begin and maintain_end must be set in pairs. If parameter maintain_begin is left blank, parameter maintain_end is also left blank. In this case, the system automatically set the start time to 02:00.

Parameter	Type	Mandatory	Description
maintain_end	String	No	<p>Indicates the time at which a maintenance time window ends.</p> <p>Format: HH:mm.</p> <ul style="list-style-type: none">• 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 Querying Maintenance Time Windows.• 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.• Parameters maintain_begin and maintain_end must be set in pairs. If parameter maintain_end is left blank, parameter maintain_start is also left blank. In this case, the system automatically set the end time to 06:00.
enable_publicip	Boolean	No	<p>Indicates whether to enable public access for a RabbitMQ instance.</p> <ul style="list-style-type: none">• true: enable• false: disable
publicip_id	String	No	<p>Indicates the ID of the elastic IP address (EIP) bound to a RabbitMQ instance.</p> <p>This parameter is mandatory if public access is enabled (that is, enable_publicip is set to true).</p>
ssl_enable	Boolean	No	<p>Indicates whether to enable SSL-encrypted access.</p> <ul style="list-style-type: none">• true: enable• false: disable
storage_spec_code	String	Yes	<p>Indicates storage I/O specification.</p> <p>Options:</p> <ul style="list-style-type: none">• dms.physical.storage.normal:• dms.physical.storage.high• dms.physical.storage.ultra
enterprise_project_id	String	No	<p>Indicates the enterprise project ID.</p>

Example request of a RabbitMQ instance

```
{
  "name": "rabbitmq-demo",
  "description": "",
  "engine": "RabbitMQ",
  "engine_version": "3.7.17",
  "storage_space": 100,
  "access_user": "*****",
  "password": "*****",
  "vpc_id": "1e93f86e-13af-46c8-97d6-d40fa62b76c2",
  "security_group_id": "0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8",
  "subnet_id": "b5fa806c-35e7-4299-b659-b39398dd4718",
  "available_zones": ["d573142f24894ef3bd3664de068b44b0"],
  "product_id": "00300-30109-0--0",
  "maintain_begin": "22:00",
  "maintain_end": "02:00",
  "ssl_enable": false,
  "enable_publicip": false,
  "publicip_id": "",
  "enterprise_project_id": "0",
  "storage_spec_code": "dms.physical.storage.ultra"
}
```

Response

Response parameters

[Table 5-3](#) describes the response parameter.

Table 5-3 Parameter description

Parameter	Type	Description
instance_id	String	Indicates the instance ID.

Example response

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

Status Code

[Table 5-4](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 5-4 Status code

Status Code	Description
200	The instance is created successfully.

5.2 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 5-5](#) describes the parameters.

Table 5-5 Parameter description

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

None.

Response

Response parameters

[Table 5-6](#) describes the response parameters.

Table 5-6 Parameter description

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.

Parameter	Type	Description
specification	String	Indicates the instance specification. <ul style="list-style-type: none">• For a single-node RabbitMQ instance, VM specifications are returned.• For a cluster RabbitMQ instance, VM specifications and the number of nodes are returned.
storage_space	Integer	Indicates the message storage space. Unit: GB
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 Instance Status .
description	String	Indicates the description of the instance.
instance_id	String	Indicates the instance ID.

Parameter	Type	Description
resource_spec_code	String	<p>Indicates the resource specifications identifier.</p> <ul style="list-style-type: none"> • dms.instance.rabbitmq.single.c3.2u4g: single-node RabbitMQ instance, 2 vCPUs 4 GB (VM specifications) • dms.instance.rabbitmq.single.c3.4u8g: single-node RabbitMQ instance, 4 vCPUs 8 GB (VM specifications) • dms.instance.rabbitmq.single.c3.8u16g: single-node RabbitMQ instance, 8 vCPUs 16 GB (VM specifications) • dms.instance.rabbitmq.single.c3.16u32g: single-node RabbitMQ instance, 16 vCPUs 32 GB (VM specifications) • dms.instance.rabbitmq.cluster.c3.4u8g.3: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 3 nodes • dms.instance.rabbitmq.cluster.c3.4u8g.5: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 5 nodes • dms.instance.rabbitmq.cluster.c3.4u8g.7: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 7 nodes • dms.instance.rabbitmq.cluster.c3.8u16g.3: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 3 nodes • dms.instance.rabbitmq.cluster.c3.8u16g.5: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 5 nodes • dms.instance.rabbitmq.cluster.c3.8u16g.7: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 7 nodes • dms.instance.rabbitmq.cluster.c3.16u32g.3: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 3 nodes • dms.instance.rabbitmq.cluster.c3.16u32g.5: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 5 nodes • dms.instance.rabbitmq.cluster.c3.16u32g.7: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 7 nodes
type	String	<p>Indicates the instance type.</p> <p>Options:</p> <ul style="list-style-type: none"> • single: single-node instance • cluster: cluster instance

Parameter	Type	Description
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.
error_code	String	Indicates an error code returned when an instance fails to be created or its status is abnormal. For details about error codes, see Table 5-7 .
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 segment.
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 an order ID.
maintain_begin	String	Indicates the time at which a maintenance time window starts. Format: HH:mm
maintain_end	String	Indicates the time at which a maintenance time window ends. Format: HH:mm
enable_publicip	Boolean	Indicates whether to enable public access for a RabbitMQ instance. <ul style="list-style-type: none"> ● true: enable ● false: disable

Parameter	Type	Description
publicip_addresses	String	Indicates the EIP bound to a RabbitMQ instance. The value of this parameter is null if public access is disabled.
publicip_id	String	Indicates the ID of the EIP bound to a RabbitMQ instance. The value of this parameter is null if public access is disabled.
management_connect_address	String	Indicates the management address of a RabbitMQ instance.
ssl_enable	Boolean	Indicates whether to enable security authentication. <ul style="list-style-type: none"> • true: enable • false: disable
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"> • true: New instance, which allows dynamic disk capacity expansion without restarting the instance. • false: Old instance.
extend_times	String	Indicates the number of disk expansion times. If it exceeds 20, the disk cannot be expanded.

Table 5-7 Error code description

Error Code	Description
public.00.0001	Internal service error.
public.00.0002	Internal service error.
public.00.0003	Internal service error.
public.00.0004	Failed to create the VPC.
public.00.0005	Failed to create the security group.
public.00.0006	Failed to create the subnet.
public.00.0007	The subnet status is abnormal.
public.00.0008	Failed to create the ECS.

Error Code	Description
public.00.0009	Failed to create the ECS.
public.00.0010	Failed to create the ECS.
public.00.0011	Failed to bind an NIC to the ECS.
public.00.0013	Failed to start the ECS.
public.00.0014	Failed to start the ECS.
public.00.0015	Failed to stop the ECS.
public.00.0018	Failed to create the ECS because the ECS resource quota is insufficient.
public.00.0024	Failed to deploy the instance.
public.00.0025	Some nodes of the instance are faulty.
public.00.0042	Failed to connect to the instance.

Example response

```
{
  "name": "dms-a11e",
  "engine": "rabbitmq",
  "engine_version": "3.7.17",
  "specification": "2vCPUs 4GB",
  "storage_space": 100,
  "used_storage_space": 50,
  "connect_address": "192.168.3.100",
  "port": 5672,
  "status": "RUNNING",
  "description": "Create a instance",
  "instance_id": "68d5745e-6af2-40e4-945d-fe449be00148",
  "resource_spec_code": "dms.instance.rabbitmq.single.c3.2u4g",
  "type": "single",
  "charging_mode": 1,
  "vpc_id": "27d99e17-42f2-4751-818f-5c8c6c03ff15",
  "vpc_name": "vpc_4944a40e-ac57-4f08-9d38-9786e2759458_192",
  "created_at": "1526367063931",
  "error_code": null,
  "product_id": "00300-30109-0--0",
  "security_group_id": "60ea2db8-1a51-4ab6-9e11-65b418c24583",
  "security_group_name": "sg_6379_4944a40e-ac57-4f08-9d38-9786e2759458",
  "subnet_id": "ec2f34b9-20eb-4872-85bd-bea9fc943128",
  "subnet_name": "subnet_az_7f336767-10ec-48a5-9ae8-9cacde119318",
  "subnet_cidr": "192.168.0.0/24",
  "available_zones": ["1d7b939b382c4c3bb3481a8ca10da785"],
  "user_id": "6d0977e4c9b74ae7b5a083a8d0d8fafa",
  "user_name": "aabb02",
  "access_user": "user",
  "order_id": "XXXXXXXXXX",
  "maintain_begin": "22:00",
  "maintain_end": "02:00",
  "ssl_enable": false,
  "management_connect_address": "http://192.168.0.177:9999"
}
```

Status Code

Table 5-8 describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 5-8 Status code

Status Code	Description
200	Specified instance queried successfully.

5.3 Modifying an Instance

Function

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

URI

PUT /v1.0/{project_id}/instances/{instance_id}

Table 5-9 Parameter description

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 5-10 describes the request parameters.

Table 5-10 Parameter description

Parameter	Type	Mandatory	Description
name	String	No	Indicates the instance name. An instance name is a string of 4 to 64 characters that contain letters, digits, and hyphens (-). An instance name 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>NOTE 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">• 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 Querying Maintenance Time Windows.• 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.• Parameters maintain_begin and maintain_end must be set in pairs. If parameter maintain_begin is left blank, parameter maintain_end is also left blank. In this case, the system automatically set the start time to 02:00:00.

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">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 Querying Maintenance Time Windows.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.Parameters maintain_begin and maintain_end must be set in pairs. If parameter maintain_end is left blank, parameter maintain_start is also left blank. In this case, the system automatically allocates the default end time 06:00:00.
security_group_id	String	No	Indicates the security group ID.
enable_publicip	Boolean	No	<p>Indicates whether to enable public access for a RabbitMQ instance.</p> <ul style="list-style-type: none">true: enablefalse: disable
publicip_id	String	No	<p>Indicates the ID of the EIP bound to a RabbitMQ instance.</p> <p>This parameter is mandatory if public access is enabled (that is, enable_publicip is set to true).</p>

Example request

Example 1:

```
{
  "name": "dms002",
  "description": "instance description"
}
```

Example 2:

```
{
  "name": "dms002",
  "description": "instance description",
  "maintain_begin": "02:00",
  "maintain_end": "06:00"
}
```

Response

Response parameters

None.

Example response

None.

Status Code

[Table 5-11](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 5-11 Status code

Status Code	Description
204	The instance is modified successfully.

5.4 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 5-12](#) describes the parameters.

Table 5-12 Parameter description

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

None.

Response

Response parameters

None.

Example response

None.

Status Code

[Table 5-13](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 5-13 Status code

Status Code	Description
204	The instance is deleted successfully.

5.5 Restarting or Deleting Instances in Batches

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 5-14](#) describes the parameter.

Table 5-14 Parameter description

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

Request

Request

Table 5-15 describes the request parameters.

Table 5-15 Parameter description

Parameter	Type	Mandatory	Description
action	String	Yes	Indicates the operation to be performed on instances. The value of this parameter can be restart or delete .
instances	Array	Yes	Indicates the list of instance IDs.
allFailure	String	No	Indicates whether to delete instances that fail to be created in batches. If this parameter is set to true , all instances that fail to be created are deleted. In this case, the instances parameter in the request can be empty.

Example request

Restarting instances in batches:

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

Deleting instances in batches:

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

Deleting all instances that fail to be created:

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

Response

Response parameters

When **action** is set to **delete**, **allFailure** is set to **true**, and an empty response is returned, the instances are deleted successfully. [Table 5-16](#) describes the parameters.

Table 5-16 Parameter description

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

Table 5-17 results parameter description

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

Example response

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

Status Code

[Table 5-18](#) describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 5-18 Status code

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

5.6 Querying 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 5-19 describes the parameters.

Table 5-19 Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Indicates the ID of a project.
engine	String	No	Indicates a message engine type The value is rabbitmq . If this parameter is not specified, all instances will be queried.
name	String	No	Indicates the instance name.
id	String	No	Indicates the instance ID.
status	String	No	Indicates the instance status. For details, see Instance Status .
includeFailure	String	No	Indicates whether to return the number of instances that fail to be created. If the value is true , the number of instances that failed to be created is returned. If the value is not true , the number is not returned.
exactMatchName	String	No	Indicates whether to search for the instance that precisely matches a specified instance name. The default value is false , indicating that a fuzzy search is performed based on a specified instance name. If the value is true , the instance that precisely matches a specified instance name is queried.

Parameter	Type	Mandatory	Description
enterprise_project_id	String	No	Indicates the enterprise project ID.

Example

```
GET /v1.0/bd6b78e2ff9e4e47bc260803ddcc7a21/instances?
start=1&limit=10&name=&status=&id=&includeFailure=true&exactMatchName=false
```

Request

Request parameters

None.

Example request

None.

Response

Response parameters

[Table 5-20](#) describes the response parameters.

Table 5-20 Parameter description

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

Table 5-21 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. <ul style="list-style-type: none">• For a single-node RabbitMQ instance, VM specifications are returned.• For a cluster RabbitMQ instance, VM specifications and the number of nodes are returned.
storage_space	Integer	Indicates the message storage space. Unit: GB
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 Instance Status .
description	String	Indicates the description of the instance.
instance_id	String	Indicates the instance ID.

Parameter	Type	Description
resource_spec_code	String	<p>Indicates the resource specifications identifier.</p> <ul style="list-style-type: none"> dms.instance.rabbitmq.single.c3.2u4g: single-node RabbitMQ instance, 2 vCPUs 4 GB (VM specifications) dms.instance.rabbitmq.single.c3.4u8g: single-node RabbitMQ instance, 4 vCPUs 8 GB (VM specifications) dms.instance.rabbitmq.single.c3.8u16g: single-node RabbitMQ instance, 8 vCPUs 16 GB (VM specifications) dms.instance.rabbitmq.single.c3.16u32g: single-node RabbitMQ instance, 16 vCPUs 32 GB (VM specifications) dms.instance.rabbitmq.cluster.c3.4u8g.3: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 3 nodes dms.instance.rabbitmq.cluster.c3.4u8g.5: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 5 nodes dms.instance.rabbitmq.cluster.c3.4u8g.7: cluster RabbitMQ instance, 4 vCPUs 8 GB (VM specifications), 7 nodes dms.instance.rabbitmq.cluster.c3.8u16g.3: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 3 nodes dms.instance.rabbitmq.cluster.c3.8u16g.5: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 5 nodes dms.instance.rabbitmq.cluster.c3.8u16g.7: cluster RabbitMQ instance, 8 vCPUs 16 GB (VM specifications), 7 nodes dms.instance.rabbitmq.cluster.c3.16u32g.3: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 3 nodes dms.instance.rabbitmq.cluster.c3.16u32g.5: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 5 nodes dms.instance.rabbitmq.cluster.c3.16u32g.7: cluster RabbitMQ instance, 16 vCPUs 32 GB (VM specifications), 7 nodes
charging_mode	Integer	Indicates a billing mode. 1: pay-per-use mode.
vpc_id	String	Indicates the ID of a VPC.
vpc_name	String	Indicates the name of a VPC.

Parameter	Type	Description
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.
error_code	String	Indicates an error code returned when an instance fails to be created or its status is abnormal. For details about error codes, see Table 5-7 .
user_id	String	Indicates the user ID.
user_name	String	Indicates the username.
order_id	String	Indicates an order ID.
maintain_begin	String	Indicates the time at which a maintenance time window starts. Format: HH:mm
maintain_end	String	Time at which the maintenance time window ends. Format: HH:mm
enable_publicip	Boolean	Indicates whether public access has been enabled for a RabbitMQ instance. <ul style="list-style-type: none"> • true: enable • false: disable
publicip_addresses	String	Indicates the EIP bound to a RabbitMQ instance. The value of this parameter is null if public access is disabled.
publicip_id	String	Indicates the ID of the EIP bound to a RabbitMQ instance. The value of this parameter is null if public access is disabled.
management_connect_address	String	Indicates the management address of a RabbitMQ instance.
ssl_enable	Boolean	Indicates whether to enable security authentication. <ul style="list-style-type: none"> • true: enable • false: disable
enterprise_project_id	String	Indicates the enterprise project ID.

Parameter	Type	Description
is_logical_volume	Boolean	Distinguishes old instances from new instances during instance capacity expansion. <ul style="list-style-type: none">• true: New instance, which allows dynamic disk capacity expansion without restarting the instance.• false: Old instance.
extend_times	String	Indicates the number of disk expansion times. If it exceeds 20, the disk cannot be expanded.

Example response

```
{
  "instances": [
    {
      "name": "rabbitmq-lxy001",
      "engine": "rabbitmq",
      "port": 5672,
      "status": "RUNNING",
      "type": "single",
      "specification": "2vCPUs 4GB",
      "engine_version": "3.7.17",
      "connect_address": "192.168.255.237",
      "instance_id": "595926bf-a648-47d8-91bc-461956794c2b",
      "resource_spec_code": "dms.instance.rabbitmq.single.c3.2u4g",
      "charging_mode": 1,
      "vpc_id": "1a28dcc5-c90d-421c-82bb-783f30f5b40a",
      "vpc_name": "vpc-y00292973",
      "created_at": "1562583302800",
      "product_id": "00300-30109-0--0",
      "security_group_id": "0cc8fdb7-872a-49da-a062-88ccc39463b5",
      "security_group_name": "sg-65eb-nw-test",
      "subnet_id": "ebba7994-260d-42ab-bce1-39a08b365dc8",
      "available_zones": [
        "d573142f24894ef3bd3664de068b44b0"
      ],
      "user_id": "50a4156d334a4a82b8745dc730dc1e00",
      "user_name": "hwstaff_f00443635",
      "access_user": "hwstaff_pub_CBUInfo",
      "maintain_begin": "02:00:00",
      "maintain_end": "06:00:00",
      "storage_space": 88,
      "total_storage_space": 100,
      "used_storage_space": 4,
      "enable_publicip": false,
      "ssl_enable": false,
      "management_connect_address": "http://192.168.255.237:15672",
      "storage_resource_id": "34825335-61cb-4ee0-949e-24b08170edb2",
      "storage_spec_code": "dms.physical.storage.ultra",
      "service_type": "advanced",
      "storage_type": "hec",
      "enterprise_project_id": "0",
      "is_logical_volume": false,
      "extend_times": 0,
      "ipv6_enable": false,
      "ipv6_connect_addresses": [],
      "connector_enable": false,
      "connector_id": "",
      "rest_enable": false,
      "rest_connect_address": "",
      "public_boundwidth": 0,
    }
  ]
}
```

```
    "message_query_inst_enable": true,  
    "vpc_client_plain": false,  
    "support_features":  
    "feature.physerver.kafka.topic.accesspolicy,message_trace_enable,feature.physerver.kafka.pulbic.dynamic,feat  
    ure.physerver.kafka.user.manager",  
    "trace_enable": false  
  }  
],  
  "instance_num": 1  
}
```

Status Code

Table 5-22 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 5-22 Status code

Status Code	Description
200	All instances are queried successfully.

6 Other APIs

6.1 Querying AZ Information

Function

This API is used to query the AZ ID.

URI

GET /v1.0/availableZones

Request

Request parameters

None.

Example request

None.

Response

Response parameters

[Table 6-1](#) and [Table 6-2](#) describe the parameters.

Table 6-1 Response parameters

Parameter	Type	Description
regionId	String	Indicates the region ID.
available_zones	Array	Indicates details of AZs. For details, see Table 6-2 .

Table 6-2 available_zones parameter description

Parameter	Type	Description
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">• true: The AZ has available resources.• false: Resources of the AZ have been sold out.

Example response

```
{
  regionId: "XXXXXX",
  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 6-3 describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 6-3 Status code

Status Code	Description
200	The AZ information is successfully queried.

6.2 Querying Product Specifications

Function

This API is used to query the product ID (parameter **product_id**) which indicates the specifications of the service you purchased.

URI

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

[Table 6-4](#) describes the parameter.

Table 6-4 Parameter description

Parameter	Type	Mandatory	Description
engine	String	No	Indicates the message engine.

Request

Request parameters

None.

Example Request

None.

Response

Response parameters

[Table 6-5](#) describes the response parameters.

Table 6-5 Parameter description

Parameter	Type	Description
name	String	Indicates the name of a message engine.
version	String	Indicates the version of the message engine.
values	Array	Indicates product specifications.

Table 6-6 values parameter description

Parameter	Type	Description
detail	Array	Indicates the details of specifications.
name	String	Indicates an instance type, which can be single-node or cluster.

Table 6-7 detail parameter description of single-node RabbitMQ instances

Parameter	Type	Description
storage	String	Indicates the message storage space.
io	Array	Indicates the I/O information.
vm_specification	String	Indicates VM specifications.
product_id	String	Indicates the product ID.
spec_code	String	Indicates the specification ID.

Table 6-8 detail parameter description of cluster RabbitMQ instances

Parameter	Type	Description
vm_specification	String	Indicates VM specifications.
product_info	Array	Indicates the product information.

Table 6-9 product_info parameter description

Parameter	Type	Description
storage	String	Indicates the message storage space.
io	Array	Indicates the I/O information.
node_num	Integer	Indicates the number of nodes in a cluster.
product_id	String	Indicates the product ID.
spec_code	String	Indicates the specification ID.

Table 6-10 io parameter description

Parameter	Type	Description
io_type	String	Indicates the I/O type.

Parameter	Type	Description
storage_spec_code	String	Indicates the I/O specification.

Example response

List of RabbitMQ instance specifications:

```
{
  "Hourly": [
    {
      "name": "RabbitMQ",
      "version": "3.7.17",
      "values": [
        {
          "detail": [
            {
              "storage": "100",
              "io": [
                {
                  "io_type": "normal",
                  "storage_spec_code": "dms.physical.storage.normal"
                },
                {
                  "io_type": "high",
                  "storage_spec_code": "dms.physical.storage.high"
                },
                {
                  "io_type": "ultra",
                  "storage_spec_code": "dms.physical.storage.ultra"
                }
              ]
            },
            {
              "vm_specification": "2vCPUs 4GB",
              "product_id": "00300-30109-0--0",
              "spec_code": "dms.instance.rabbitmq.single.c3.2u4g"
            }
          ],
          {
            "storage": "100",
            "io": [
              {
                "io_type": "normal",
                "storage_spec_code": "dms.physical.storage.normal"
              },
              {
                "io_type": "high",
                "storage_spec_code": "dms.physical.storage.high"
              },
              {
                "io_type": "ultra",
                "storage_spec_code": "dms.physical.storage.ultra"
              }
            ],
            {
              "vm_specification": "4vCPUs 8GB",
              "product_id": "00300-30111-0--0",
              "spec_code": "dms.instance.rabbitmq.single.c3.4u8g"
            }
          ],
          {
            "storage": "100",
            "io": [
              {
                "io_type": "normal",
                "storage_spec_code": "dms.physical.storage.normal"
              },
              {
                "io_type": "high",
                "storage_spec_code": "dms.physical.storage.high"
              },
              {
                "io_type": "ultra",
                "storage_spec_code": "dms.physical.storage.ultra"
              }
            ],
            {
              "vm_specification": "8vCPUs 16GB",
              "product_id": "00300-30113-0--0",
              "spec_code": "dms.instance.rabbitmq.single.c3.8u16g"
            }
          ]
        }
      ]
    }
  ]
}
```

```
        "io_type": "high",
        "storage_spec_code": "dms.physical.storage.high"
      },
      {
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
      }
    ],
    "vm_specification": "8vCPUs 16GB",
    "product_id": "00300-30113-0--0",
    "spec_code": "dms.instance.rabbitmq.single.c3.8u16g"
  },
  {
    "storage": "100",
    "io": [
      {
        "io_type": "normal",
        "storage_spec_code": "dms.physical.storage.normal"
      },
      {
        "io_type": "high",
        "storage_spec_code": "dms.physical.storage.high"
      },
      {
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
      }
    ],
    "vm_specification": "16vCPUs 32GB",
    "product_id": "00300-30115-0--0",
    "spec_code": "dms.instance.rabbitmq.single.c3.16u32g"
  }
],
"name": "single"
},
{
  "detail": [
    {
      "vm_specification": "4vCPUs 8GB",
      "product_info": [
        {
          "storage": "300",
          "io": [
            {
              "io_type": "normal",
              "storage_spec_code": "dms.physical.storage.normal"
            },
            {
              "io_type": "high",
              "storage_spec_code": "dms.physical.storage.high"
            },
            {
              "io_type": "ultra",
              "storage_spec_code": "dms.physical.storage.ultra"
            }
          ],
          "node_num": "3",
          "product_id": "00300-30209-0--0",
          "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.3"
        },
        {
          "storage": "500",
          "io": [
            {
              "io_type": "normal",
              "storage_spec_code": "dms.physical.storage.normal"
            },
            {
              "io_type": "high",
```

```
        "storage_spec_code": "dms.physical.storage.high"
      },
      {
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
      }
    ],
    "node_num": "5",
    "product_id": "00300-30211-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.5"
  },
  {
    "storage": "700",
    "io": [
      {
        "io_type": "normal",
        "storage_spec_code": "dms.physical.storage.normal"
      },
      {
        "io_type": "high",
        "storage_spec_code": "dms.physical.storage.high"
      },
      {
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
      }
    ],
    "node_num": "7",
    "product_id": "00300-30213-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.7"
  }
]
},
{
  "vm_specification": "8vCPUs 16GB",
  "product_info": [
    {
      "storage": "300",
      "io": [
        {
          "io_type": "normal",
          "storage_spec_code": "dms.physical.storage.normal"
        },
        {
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high"
        },
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra"
        }
      ],
      "node_num": "3",
      "product_id": "00300-30215-0--0",
      "spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.3"
    },
    {
      "storage": "500",
      "io": [
        {
          "io_type": "normal",
          "storage_spec_code": "dms.physical.storage.normal"
        },
        {
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high"
        },
        {
          "io_type": "ultra",
```

```
        "storage_spec_code": "dms.physical.storage.ultra"
      },
      ],
      "node_num": "5",
      "product_id": "00300-30217-0--0",
      "spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.5"
    },
    {
      "storage": "700",
      "io": [
        {
          "io_type": "normal",
          "storage_spec_code": "dms.physical.storage.normal"
        },
        {
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high"
        },
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra"
        }
      ],
      "node_num": "7",
      "product_id": "00300-30219-0--0",
      "spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.7"
    }
  ]
},
{
  "vm_specification": "16vCPUs 32GB",
  "product_info": [
    {
      "storage": "300",
      "io": [
        {
          "io_type": "normal",
          "storage_spec_code": "dms.physical.storage.normal"
        },
        {
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high"
        },
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra"
        }
      ],
      "node_num": "3",
      "product_id": "00300-30221-0--0",
      "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.3"
    },
    {
      "storage": "500",
      "io": [
        {
          "io_type": "normal",
          "storage_spec_code": "dms.physical.storage.normal"
        },
        {
          "io_type": "high",
          "storage_spec_code": "dms.physical.storage.high"
        },
        {
          "io_type": "ultra",
          "storage_spec_code": "dms.physical.storage.ultra"
        }
      ],
      "node_num": "5",
```

```
        "product_id": "00300-30223-0--0",
        "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.5"
      },
      {
        "storage": "700",
        "io": [
          {
            "io_type": "normal",
            "storage_spec_code": "dms.physical.storage.normal"
          },
          {
            "io_type": "high",
            "storage_spec_code": "dms.physical.storage.high"
          },
          {
            "io_type": "ultra",
            "storage_spec_code": "dms.physical.storage.ultra"
          }
        ],
        "node_num": "7",
        "product_id": "00300-30225-0--0",
        "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.7"
      }
    ]
  },
  "name": "cluster"
}
],
"Monthly": [
  {
    "name": "RabbitMQ",
    "version": "3.7.17",
    "values": [
      {
        "detail": [
          {
            "storage": "100",
            "io": [
              {
                "io_type": "normal",
                "storage_spec_code": "dms.physical.storage.normal"
              },
              {
                "io_type": "high",
                "storage_spec_code": "dms.physical.storage.high"
              },
              {
                "io_type": "ultra",
                "storage_spec_code": "dms.physical.storage.ultra"
              }
            ],
            "vm_specification": "2vCPUs 4GB",
            "product_id": "00300-30110-0--0",
            "spec_code": "dms.instance.rabbitmq.single.c3.2u4g"
          },
          {
            "storage": "100",
            "io": [
              {
                "io_type": "normal",
                "storage_spec_code": "dms.physical.storage.normal"
              },
              {
                "io_type": "high",
                "storage_spec_code": "dms.physical.storage.high"
              }
            ],
            "vm_specification": "2vCPUs 4GB",
            "product_id": "00300-30110-0--0",
            "spec_code": "dms.instance.rabbitmq.single.c3.2u4g"
          }
        ]
      }
    ]
  }
]
```



```
{
  {
    "io_type": "ultra",
    "storage_spec_code": "dms.physical.storage.ultra"
  },
  "vm_specification": "4vCPUs 8GB",
  "product_id": "00300-30112-0--0",
  "spec_code": "dms.instance.rabbitmq.single.c3.4u8g"
},
{
  "storage": "100",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "vm_specification": "8vCPUs 16GB",
  "product_id": "00300-30114-0--0",
  "spec_code": "dms.instance.rabbitmq.single.c3.8u16g"
},
{
  "storage": "100",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "vm_specification": "16vCPUs 32GB",
  "product_id": "00300-30116-0--0",
  "spec_code": "dms.instance.rabbitmq.single.c3.16u32g"
}
],
"name": "single"
},
{
  "detail": [
    {
      "vm_specification": "4vCPUs 8GB",
      "product_info": [
        {
          "storage": "300",
          "io": [
            {
              "io_type": "normal",
              "storage_spec_code": "dms.physical.storage.normal"
            },
            {
              "io_type": "high",
              "storage_spec_code": "dms.physical.storage.high"
            },
            {

```

```
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
    },
    ],
    "node_num": "3",
    "product_id": "00300-30210-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.3"
},
{
    "storage": "500",
    "io": [
        {
            "io_type": "normal",
            "storage_spec_code": "dms.physical.storage.normal"
        },
        {
            "io_type": "high",
            "storage_spec_code": "dms.physical.storage.high"
        },
        {
            "io_type": "ultra",
            "storage_spec_code": "dms.physical.storage.ultra"
        }
    ],
    "node_num": "5",
    "product_id": "00300-30212-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.5"
},
{
    "storage": "700",
    "io": [
        {
            "io_type": "normal",
            "storage_spec_code": "dms.physical.storage.normal"
        },
        {
            "io_type": "high",
            "storage_spec_code": "dms.physical.storage.high"
        },
        {
            "io_type": "ultra",
            "storage_spec_code": "dms.physical.storage.ultra"
        }
    ],
    "node_num": "7",
    "product_id": "00300-30214-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.4u8g.7"
}
]
},
{
    "vm_specification": "8vCPUs 16GB",
    "product_info": [
        {
            "storage": "300",
            "io": [
                {
                    "io_type": "normal",
                    "storage_spec_code": "dms.physical.storage.normal"
                },
                {
                    "io_type": "high",
                    "storage_spec_code": "dms.physical.storage.high"
                },
                {
                    "io_type": "ultra",
                    "storage_spec_code": "dms.physical.storage.ultra"
                }
            ],
        }
    ],
}
```

```
"node_num": "3",
"product_id": "00300-30216-0--0",
"spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.3"
},
{
  "storage": "500",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "node_num": "5",
  "product_id": "00300-30218-0--0",
  "spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.5"
},
{
  "storage": "700",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "node_num": "7",
  "product_id": "00300-30220-0--0",
  "spec_code": "dms.instance.rabbitmq.cluster.c3.8u16g.7"
}
],
"vm_specification": "16vCPUs 32GB",
"product_info": [
  {
    "storage": "300",
    "io": [
      {
        "io_type": "normal",
        "storage_spec_code": "dms.physical.storage.normal"
      },
      {
        "io_type": "high",
        "storage_spec_code": "dms.physical.storage.high"
      },
      {
        "io_type": "ultra",
        "storage_spec_code": "dms.physical.storage.ultra"
      }
    ],
    "node_num": "3",
    "product_id": "00300-30222-0--0",
    "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.3"
  },

```

```
{
  "storage": "500",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "node_num": "5",
  "product_id": "00300-30224-0--0",
  "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.5"
},
{
  "storage": "700",
  "io": [
    {
      "io_type": "normal",
      "storage_spec_code": "dms.physical.storage.normal"
    },
    {
      "io_type": "high",
      "storage_spec_code": "dms.physical.storage.high"
    },
    {
      "io_type": "ultra",
      "storage_spec_code": "dms.physical.storage.ultra"
    }
  ],
  "node_num": "7",
  "product_id": "00300-30226-0--0",
  "spec_code": "dms.instance.rabbitmq.cluster.c3.16u32g.7"
}
]
}
],
"name": "cluster"
}
}
]
}
```

Status Code

Table 6-11 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 6-11 Status code

Status Code	Description
200	Product specifications queried successfully.

6.3 Querying 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

None.

Response

Response parameters

[Table 6-12](#) and [Table 6-13](#) describe the response parameters.

Table 6-12 Parameter description

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

Table 6-13 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": [
    {
      "seq": 1,
      "begin": "22",
      "end": "02",
      "default": false
    },
    {
      "seq": 2,
      "begin": "02",
      "end": "06",
      "default": true
    },
    {
      "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",
      "default": false
    }
  ]
}
```

Status Code

Table 6-14 describes the status code of successful operations. For details about other status codes, see [Status Code](#).

Table 6-14 Status code

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

7 Permissions Policies and Supported Actions

This chapter describes fine-grained permissions management for your DMS for RabbitMQ. If your account does not need individual IAM users, then you may skip over this chapter.

By default, new 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

If you want to allow or deny the access to an API, fine-grained authorization is a good choice.

An account has all of the permissions required to call all APIs, but IAM users must have the required permissions specifically assigned. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user creates a RabbitMQ instance using an API, the user must have been granted permissions that allow the **dms:instance:create** action.

Supported Actions

IAM provides system-defined policies that can be directly used. 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 lists common concepts related to policies:

- Permission: a statement in a policy that allows or denies certain operations.
- APIs: REST APIs that can be called in a custom policy.

- Actions: Added to a custom policy to control permissions for specific operations.
- IAM project or enterprise projects: type of projects for which an action will take effect. Policies that contain actions supporting both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Management.

DMS 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 7-1 DMS actions

Permissions	APIs	Actions	IAM Project	Enterprise Project
Creating an instance	POST /v1.0/{project_id}/instances	dms:instance:create	√	√
Viewing instance details	GET /v1.0/{project_id}/instances/{instance_id}	dms:instance:get	√	√
Modifying an instance	PUT /v1.0/{project_id}/instances/{instance_id}	dms:instance:modify	√	√
Deleting an instance	DELETE /v1.0/{project_id}/instances/{instance_id}	dms:instance:delete	√	√
Modifying instance specifications	POST /v1.0/{project_id}/instances/{instance_id}/extend	dms:instance:scale	√	√
Querying all instances	GET /v1.0/{project_id}/instances	dms:instance:list	√	√
Restarting an instance	POST /v1.0/{project_id}/instances/action	dms:instance:modifyStatus	√	√

Permissions	APIs	Actions	IAM Project	Enterprise Project
Changing instance passwords	This operation is supported only by using the console and not by calling APIs.	dms:instance:modifyAuthInfo	√	√
Resetting Instance Passwords	This operation is supported only by using the console and not by calling APIs.	dms:instance:resetAuthInfo	√	√
Querying one or more background tasks that have not been deleted	This operation is supported only by using the console and not by calling APIs.	dms:instance:getBackgroundTask	√	√
Deleting a background task	This operation is supported only by using the console and not by calling APIs.	dms:instance:deleteBackgroundTask	√	√
Changing public access bandwidth or enabling or disabling public access	This operation is supported only by using the console and not by calling APIs.	dms:instance:modify	√	√
Querying public access bandwidth	This operation is supported only by using the console and not by calling APIs.	dms:instance:get	√	√

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 timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

8.2 Error Code

Table 8-2 Error codes of RabbitMQ instances

Status Code	Error Code	Description
400	111400002	The project ID format is invalid.
400	111400004	The request body is empty.
400	111400005	The message body is not in JSON format or contains invalid characters.
400	111400007	Unsupported type.

Status Code	Error Code	Description
400	111400008	Unsupported version.
400	111400009	Invalid product_id .
400	111400010	Invalid instance name. The name must be 4 to 64 characters long. Only letters, digits, underscores (_), and hyphens (-) are allowed.
400	111400011	The instance description can contain a maximum of 1024 characters.
400	111400012	The password does not meet the complexity requirements. An instance password must: <ul style="list-style-type: none"> • Be a string consisting of 8 to 32 characters. • Contain at least two of the following character types: <ul style="list-style-type: none"> - Lowercase letters - Uppercase letters - Digits - Special characters `~!@#\$\$%^&*()-_+=\ [{ }];',<.>/?
400	111400013	vpc_id in the request is empty.
400	111400014	security_group_id in the request is empty.
400	111400015	Invalid username. A username must be 4 to 64 characters long and consist of only letters, digits, and hyphens (-).
400	111400016	subnet_id in the request is empty.
400	111400018	This subnet must exist in the VPC.
400	111400019	The password does not meet the complexity requirements.
400	111400020	DHCP must be enabled for this subnet.
400	111400026	This operation is not allowed due to the instance status.
400	111400037	The instanceParams parameter in the request contains invalid characters or is not in JSON format.

Status Code	Error Code	Description
400	111400038	The periodNum parameter in the request must be an integer.
400	111400042	The AZ does not exist.
400	111400046	This security group does not exist.
400	111400048	Invalid security group rules. Ensure that rules with the protocol being ANY are configured for both the inbound and outbound directions.
400	111400060	This instance name already exists.
400	111400061	Invalid instance ID format.
400	111400062	Invalid request parameter. The status of an instance to be queried must be a value listed in Table 8-3 .
400	111400063	Invalid configuration parameter {0}.
400	111400064	The action parameter in the request must be delete or restart .
400	111400065	The instances parameter in the request is empty.
400	111400066	Invalid configuration parameter {0}.
400	111400067	The available_zones parameter in the request must be an array that contains only one AZ ID.
400	111400068	The VPC does not exist.
400	111400080	Incorrect instance password.
400	111400081	Duplicate instance name.
400	111400099	The following instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted: {}
400	111400100	The instances array can contain a maximum of 50 instance IDs.
400	111400106	Invalid maintenance time window.

Status Code	Error Code	Description
401	111401001	Invalid token.
401	111401003	The token is missing.
401	111401004	The project ID and token do not match.
403	111403002	A tenant has the read-only permission and cannot perform operations on DMS.
403	111403003	This role does not have the permissions to perform this operation.
404	111404001	The requested URL does not exist.
404	111404002	This instance does not exist.
404	111404004	Connector does not exist.
404	111404007	Connector already exists.
405	111405001	This request method is not allowed.
400	111400500	Invalid disk space.
400	111400125	Invalid SPEC_CODE .
400	111400124	The maximum number of disk expansion times has been reached.
500	111500000	Internal service error.
500	111500006	Internal service error.
500	111500007	Internal service error.
500	111500003	Internal service error.
500	1115000024	Internal service error.

Status Code	Error Code	Description
500	111500025	Internal service error.
500	111500041	Internal service error.
500	111500051	Internal service error.
500	111500052	Internal service error.
500	111500053	Internal service error.
500	111500054	Internal service error.
500	111500070	Internal service error.
500	111500071	Internal service error.
500	111500094	Internal service error.
500	111500106	Internal service error.

8.3 Instance Status

Table 8-3 Instance status description

Status	Description
Creating	The instance is being created.
Running	The instance is running properly. Instances in the Running state can provide services.
Faulty	The instance is not running properly.
Restarting	The instance is being restarted.
Resizing	The instance is in the process of changing specifications or enabling public access.
Resizing failed	The instance specifications failed to be changed or public access failed to be enabled.

8.4 Obtaining a Project ID

Obtaining a Project ID by Calling an API

The API for obtaining a project ID is **GET** <https://{Endpoint}/v3/projects>, where *{Endpoint}* indicates the IAM endpoint obtained 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": "cn-north-4",
      "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** Click the username in the upper right corner and choose **My Credential** from the drop-down list.

On the **My Credential** page, view the project IDs in the project list.

If there are multiple projects in one region, expand **Region** and view sub-project IDs in the **Project ID** column.

-----End

8.5 Obtaining the Account Name and Account ID

The account name and account ID are required for some URLs when an API is called. To obtain the account name and account ID, perform the following operations:

1. Log in to the management console.
2. Click the username in the upper right corner and choose **My Credential** from the drop-down list.

View the account name and account ID.

A Change History

Date	Description
2020-11-06	This issue is the first official release.