Distributed Message Service for RabbitMQ

API Reference

Issue 08

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1 Before You Start

Welcome to *Distributed Message Service for RabbitMQ*. *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 section describes functions, syntax, parameters, and examples of the application programming interfaces (APIs) of DMS for RabbitMQ.

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

Endpoints

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

Basic 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. To ensure security, create Identity and Access Management (IAM) users and grant them permissions for routine management.

- 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

  Regions are divided from the dimensions of geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are shared within the same region. Regions are classified as universal regions and dedicated regions. A universal region

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provides universal cloud services for common tenants. A dedicated region provides services of the same type only or for specific tenants.

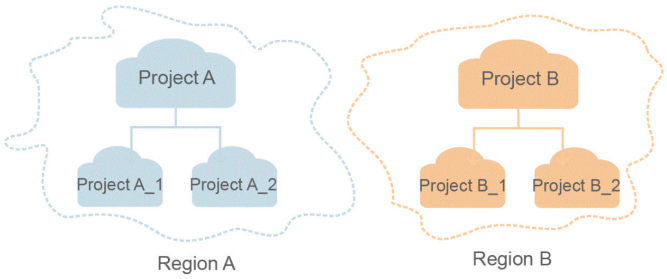
- Availability Zone (AZ)

  An availability zone (AZ) comprises one or more physical data centers equipped with independent ventilation, fire, water, and electricity facilities. Compute, 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 support cross-AZ high-availability systems.

- Project

  A project corresponds to a region. Projects group and isolate resources (including compute, storage, and network resources) across physical regions. Users can be granted permissions in a default project to access all resources in the region associated with the project. For more refined access control, create subprojects under a project and purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

  Figure 1-1 Project isolating model

- Enterprise Project

  Enterprise projects group and manage resources across regions. Resources in enterprise projects are logically isolated from each other. An enterprise project can contain resources in multiple regions, and resources can be directly transferred between enterprise projects.

  For details about how to obtain enterprise project IDs and features, see the **Enterprise Management User Guide**.

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2 API Overview

Table 2-1 Instance management APIs

APIs	Description
Managing Lifecycle	Includes: • Creating an Instance • Listing All Instances • Querying an Instance • Deleting an Instance • Modifying Instance Information • Batch Deleting Instances
Instance Management	Includes: • Resetting the Password • Listing Plug-ins • Enabling or Disabling a Plug-in
Specification Modification Management	Includes: • Querying Product Information for Specification Modification of Instances with New Flavors • Modifying Specifications of Instances with New Flavors
Virtual Host Management	Includes: • Creating a Virtual Host • Querying Virtual Hosts • Deleting Specified Virtual Hosts in Batches
Exchange Management	Includes: • Creating an Exchange • Querying Exchanges • Deleting Specified Exchanges in Batches

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APIs	Description
Queue Management	Includes: • Creating a Queue • Querying Queues of a Virtual Host • Deleting Specified Queues in Batches • Clearing Messages in a Queue • Querying Specified Queue Details
Binding Management	Includes: • Adding a Binding • Querying Bindings of an Exchange • Deleting Bindings
User Management	Includes: • Creating a User • Querying Users • Modifying User Parameters • Deleting Users
Background Task Management	Includes: • Listing Background Tasks • Querying a Background Task • Deleting a Background Task
Tag Management	Includes: • Batch Adding or Deleting Tags • Listing Tags of an Instance • Listing Tags of a Project
Other APIs	Includes: • Listing Maintenance Time Windows • Listing AZ Information • Querying Product Specifications • Querying Instance Monitoring Dimensions • Querying RabbitMQ Product vCPUs

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3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

Table 3-1 Parameters in a URI

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from **Regions and Endpoints**. For example, the endpoint of IAM in the **CN-Hong Kong** region is **iam.ap-southeast-1.myhuaweicloud.com**.
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used for **creating an IAM user** is **/v3.0/OS-USER/users**.
query-string	Query parameter, which is optional. Ensure that a question mark (**?**) is included before each query parameter that is in the format of *Parameter name*=*Parameter value*. For example, **?limit=10** indicates that a maximum of 10 data records will be displayed.

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

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

Figure 3-1 Example URI

NOTE

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

Request Methods

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

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

In the URI of the API for **creating an IAM user**, the request method is **POST**, so the request is:

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

Request Header

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

Table 3-2 lists the common request header fields.

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Table 3-2 Common request header fields

Name	Description	Mandatory	Example Value
Host	Request server information, which is obtained from the URL of a service API. The value is in the format of *Hostname*:*Port number*. If no port is specified, the default port will be used. For HTTPS, port 443 is used by default.	No This parameter is mandatory for AK/SK authentication.	code.test.com or code.test.com:443
Content-Type	Message body type or format. The default value **application/json** is recommended. Other values of this field will be provided for specific APIs if any.	Yes	application/json
Content-Length	Length of the request body. The unit is byte.	No	3495
X-Project-Id	Project ID. Obtain the project ID by following the instructions in **Obtaining a Project ID**.	No This field is mandatory for requests that use AK/SK authentication in the Dedicated Cloud (DeC) scenario or multi-project scenario.	e9993fc787d94b6c886cbaa340f9c0f4

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

NOTE

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

For more information, see "AK/SK-based Authentication" in **Authentication**.

The API used for **creating an IAM user** requires authentication using AK/SK. An example of such requests is as follows:

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

Request Body (Optional)

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

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

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

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

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

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

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

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

3.2 Authentication

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

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

AK/SK-based Authentication

NOTE

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

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

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

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

NOTICE

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

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Token-based Authentication

NOTE

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

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

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

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

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

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

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

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

3.3 Returned Values

Status Code

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

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A status code is a group of digits ranging from 1xx to 5xx. It indicates the status of a response. For more information, see **Status Code**.

If status code **201** is returned for the calling of the API for **obtaining a user token**, the request is successful.

Response Header

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

Figure 3-2 shows the response header for the API of **creating an IAM user**.

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

```
"X-Frame-Options": "SAMEORIGIN",
"X-IAM-ETag-id": "2562365939-d8f6f12921974cb097338ac11fceac8a",
"Transfer-Encoding": "chunked",
"Strict-Transport-Security": "max-age=31536000; includeSubdomains;",
"Server": "api-gateway",
"X-Request-Id": "af2953f2bcc67a42325a69a19e6c32a2",
"X-Content-Type-Options": "nosniff",
"Connection": "keep-alive",
"X-Download-Options": "noopen",
"X-XSS-Protection": "1; mode=block;",
"X-IAM-Trace-Id": "token_[redacted]_null_af2953f2bcc67a42325a69a19e6c32a2",
"Date": "Tue, 21 May 2024 09:03:40 GMT",
"Content-Type": "application/json; charset=utf8"
```

(Optional) Response Body

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

The response body for the API of **creating an IAM user** is shown as follows. The following shows part of the response body for the API to obtain a user token.

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

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

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

In the preceding information, **error_code** is an error code, and **error_msg** describes the error.

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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**.
- RabbitMQ endpoint obtained from **Regions and Endpoints**.

Creating a RabbitMQ Instance

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

```
{
 "name": "rabbitmq",
 "engine": "rabbitmq",
 "engine_version": "3.8.35",
 "storage_space": 100,
 "access_user": "test",
 "password": "ZxxxA",
 "vpc_id": "eadxxxe72c",
 "security_group_id": "aa75axxxc8c73220",
 "subnet_id": "3cb6axxx671d6a8",
 "available_zones": [
  "effdcxxxb42f56533"
 ],
 "product_id": "c6.2u4g.single",
 "storage_spec_code": "dms.physical.storage.ultra.v2"
}
```

- **name**: name of the instance.
- **engine**: message engine. The value is **rabbitmq**.
- **engine_version**: version of the message engine.
- **storage_space**: message storage space in GB. For details about the value range, see **Creating an Instance**.
- **access_user**: user-defined username for logging in to RabbitMQ.
- **password**: user-defined password for logging in to RabbitMQ.

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- **vpc_id**: ID of the VPC where the RabbitMQ instance resides. Obtain the value by calling the API described in **Creating an Instance**.
- **security_group_id**: ID of the security group. Obtain the value by calling the API described in **Creating an Instance**.
- **subnet_id**: ID of the VPC subnet. Obtain the value by calling the API described in **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**.
- **storage_spec_code**: storage I/O specification. For details about the value range, see **Creating an Instance**.

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5 APIs V2 (Recommended)

5.1 Managing Lifecycle

5.1.1 Creating an Instance

Function

This API is used to create an instance in the pay-per-use or yearly/monthly mode.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{engine}/{project_id}/instances

Table 5-1 Path Parameters

Parameter	Mandatory	Type	Description
engine	Yes	String	Message engine.
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.

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Request Parameters

Table 5-2 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name. An instance name can contain 4 to 64 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.
description	No	String	Description of an instance. The description supports up to 1024 characters. **NOTE** 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: **rabbitmq**.
engine_version	Yes	String	Version of the message engine. • **3.8.35** and **AMQP-0-9-1**.
enable_acl	No	Boolean	ACL (available only for the AMQP version)
storage_space	Yes	Integer	Message storage space in GB. Value range: • Single-node RabbitMQ instance: 100–90,000 GB • Cluster RabbitMQ instance: 100 GB × Number of nodes to 90,000 GB, 200 GB × Number of nodes to 90,000 GB, and 300 GB × Number of nodes to 90,000 GB
access_user	No	String	A username must start with a letter and only letters, digits, hyphens (-), and underscores (_) are allowed. It can contain 4 to 64 characters.

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Parameter	Mandatory	Type	Description
password	No	String	Instance password. The password must meet the following complexity requirements: • Contains 8 to 32 characters. • Contains at least two of the following character types: – Lowercase letters – Uppercase letters – Digits – Special characters `~!@#$%^&*()-_=+|[{}]:'",<.>/?
vpc_id	Yes	String	VPC ID. To obtain it, log in to the VPC console and view the VPC ID on the VPC details page.
security_group_id	Yes	String	Security group ID. 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 ID. To obtain it, log in to VPC console and click the target subnet on the **Subnets** 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. Obtain the AZ ID by referring to **Listing AZ Information**. This parameter cannot be empty or null.
product_id	Yes	String	Product ID. Obtain the product ID from **Querying Product Specifications List**. If the product is of the cluster type (that is, **type** is set to **cluster**), the **broker_num** field is mandatory.

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Parameter	Mandatory	Type	Description
broker_num	No	Integer	Number of brokers. If the product is of the single-node type, there can be only 1 broker. If the product is of the cluster type, there can be 3, 5, or 7 brokers. If the product type is **single**: • 1 If the product type is **cluster**: • 3 • 5 • 7
maintain_begin	No	String	Indicates the time at which a 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.

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Parameter	Mandatory	Type	Description
maintain_end	No	String	Indicates the time at which a 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 for the RabbitMQ instance. • **true**: enable • **false**: disable
publicip_id	No	String	ID of the EIP bound to the RabbitMQ instance. This parameter is mandatory if public access is enabled (that is, **enable_publicip** is set to **true**).
ssl_enable	No	Boolean	Whether to enable SSL encryption for access. • **true**: enable • **false**: disable

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Parameter	Mandatory	Type	Description
storage_spec_code	Yes	String	Storage I/O specification. For details, see **Disk Types and Disk Performance**. Value range: • **dms.physical.storage.high.v2** • **dms.physical.storage.ultra.v2** • **dms.physical.storage.high.dss.v2 (DeC)** • **dms.physical.storage.ultra.dss.v2 (DeC)**
enterprise_project_id	No	String	Enterprise project ID. This parameter is mandatory for an enterprise project account.
tags	No	Array of **TagEntity** objects	Tag list.
bss_param	No	**BssParam** object	Parameter related to the yearly/monthly billing mode. If this parameter is left blank, the billing mode is pay-per-use by default. If this parameter is not left blank, the billing mode is yearly/monthly.

Table 5-3 TagEntity

Parameter	Mandatory	Type	Description
key	No	String	Tag key. • Must be specified. • Must be unique for the same instance. • Can contain 1 to 128 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@ • Cannot start with _sys_ • Cannot start or end with a space.

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Parameter	Mandatory	Type	Description
value	No	String	Tag value. • Can contain 0 to 255 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@

Table 5-4 BssParam

Parameter	Mandatory	Type	Description
is_auto_renew	No	Boolean	Whether auto renewal is enabled. Options: • **true**: Auto renewal is enabled. • **false**: Auto renewal is not enabled. By default, auto renewal is disabled.
charging_mode	No	String	Billing mode. This parameter specifies a payment mode. Options: • **prePaid**: yearly/monthly billing. • **postPaid**: pay-per-use billing. The default value is **postPaid**.
is_auto_pay	No	Boolean	Specifies whether the order is automatically or manually paid. Options: • **true**: The order will be automatically paid. • **false**: The order must be manually paid. The default payment mode is manual.

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Parameter	Mandatory	Type	Description
period_type	No	String	Subscription period type. Options: • **month** • **year**: **This parameter is valid and mandatory only when **chargingMode** is set to **prePaid**. **
period_num	No	Integer	Subscribed periods. Options: • If **periodType** is **month**, the value ranges from **1** to **9**. • If **periodType** is **year**, the value ranges from **1** to **3**. **This parameter is valid and mandatory only when **chargingMode** is set to **prePaid**. **

Response Parameters

Status code: 200

Table 5-5 Response body parameters

Parameter	Type	Description
instance_id	String	Instance ID.

Example Requests

- Creating a pay-per-use RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

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

{
  "name" : "rabbitmq-demo",
  "description" : "",
  "engine" : "RabbitMQ",
  "engine_version" : "3.8.35",
  "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" ],
```

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```
  "product_id" : "c6.2u4g.single",
  "ssl_enable" : false,
  "enable_publicip" : false,
  "publicip_id" : "",
  "storage_spec_code" : "dms.physical.storage.high.v2"
}
```

- Creating a yearly/monthly RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

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

{
  "name" : "rabbitmq-demo",
  "description" : "",
  "engine" : "RabbitMQ",
  "engine_version" : "3.8.35",
  "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" : "c6.2u4g.single",
  "ssl_enable" : false,
  "enable_publicip" : false,
  "publicip_id" : "",
  "storage_spec_code" : "dms.physical.storage.high.v2",
  "bss_param" : {
    "charging_mode" : "prePaid",
    "period_type" : "month",
    "period_num" : 1,
    "is_auto_pay" : true
  }
}
```

- Creating a RabbitMQ instance with AMQP-0-9-1, amqp.b1.large.1, and 100 GB

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

{
  "name" : "rabbitmq-aor-demo",
  "description" : "",
  "engine" : "RabbitMQ",
  "engine_version" : "AMQP-0-9-1",
  "storage_space" : 100,
  "vpc_id" : "05590544-f553-4158-be38-c791589ad303",
  "security_group_id" : "030f635d-b407-4ffb-b530-6b4eaf8edc03",
  "subnet_id" : "89c1cb26-787b-4d66-a6e4-1bd887f19183",
  "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
  "product_id" : "amqp.b1.large.1",
  "broker_num" : 1,
  "ssl_enable" : false,
  "enable_publicip" : false,
  "storage_spec_code" : "dms.physical.storage.high.v2",
  "enable_acl" : true,
  "enterprise_project_id" : 0
}
```

Example Responses

Status code: 200

Instance created successfully.

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

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SDK Sample Code

The SDK sample code is as follows.

Java

- Creating a pay-per-use RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

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

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

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

public class CreatePostPaidInstanceByEngineSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreatePostPaidInstanceByEngineRequest request = new CreatePostPaidInstanceByEngineRequest();

request.withEngine(CreatePostPaidInstanceByEngineRequest.EngineEnum.fromValue("{engine}"));
        CreateInstanceReq body = new CreateInstanceReq();
        List<String> listbodyAvailableZones = new ArrayList<>();
        listbodyAvailableZones.add("d573142f24894ef3bd3664de068b44b0");

body.withStorageSpecCode(CreateInstanceReq.StorageSpecCodeEnum.fromValue("dms.physical.storage.high.v2"));
        body.withSslEnable(false);
        body.withPublicipId("");
        body.withEnablePublicip(false);
        body.withProductId("c6.2u4g.single");
        body.withAvailableZones(listbodyAvailableZones);
        body.withSubnetId("b5fa806c-35e7-4299-b659-b39398dd4718");
        body.withSecurityGroupId("0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8");
        body.withVpcId("1e93f86e-13af-46c8-97d6-d40fa62b76c2");
        body.withPassword("******");
        body.withAccessUser("******");
        body.withStorageSpace(100);
        body.withEngineVersion("3.8.35");
        body.withEngine(CreateInstanceReq.EngineEnum.fromValue("RabbitMQ"));
        body.withDescription("");
```

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```
        body.withName("rabbitmq-demo");
        request.withBody(body);
        try {
            CreatePostPaidInstanceByEngineResponse response =
client.createPostPaidInstanceByEngine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Creating a yearly/monthly RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

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

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

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

public class CreatePostPaidInstanceByEngineSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreatePostPaidInstanceByEngineRequest request = new
CreatePostPaidInstanceByEngineRequest();

request.withEngine(CreatePostPaidInstanceByEngineRequest.EngineEnum.fromValue("{engine}"));
        CreateInstanceReq body = new CreateInstanceReq();
        BssParam bssParambody = new BssParam();
        bssParambody.withChargingMode(BssParam.ChargingModeEnum.fromValue("prePaid"))
            .withIsAutoPay(true)
            .withPeriodType(BssParam.PeriodTypeEnum.fromValue("month"))
            .withPeriodNum(1);
        List<String> listbodyAvailableZones = new ArrayList<>();
```

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```
        listbodyAvailableZones.add("d573142f24894ef3bd3664de068b44b0");
        body.withBssParam(bssParambody);

body.withStorageSpecCode(CreateInstanceReq.StorageSpecCodeEnum.fromValue("dms.physical.storag
e.high.v2"));
        body.withSslEnable(false);
        body.withPublicipId("");
        body.withEnablePublicip(false);
        body.withProductId("c6.2u4g.single");
        body.withAvailableZones(listbodyAvailableZones);
        body.withSubnetId("b5fa806c-35e7-4299-b659-b39398dd4718");
        body.withSecurityGroupId("0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8");
        body.withVpcId("1e93f86e-13af-46c8-97d6-d40fa62b76c2");
        body.withPassword("******");
        body.withAccessUser("******");
        body.withStorageSpace(100);
        body.withEngineVersion("3.8.35");
        body.withEngine(CreateInstanceReq.EngineEnum.fromValue("RabbitMQ"));
        body.withDescription("");
        body.withName("rabbitmq-demo");
        request.withBody(body);
        try {
            CreatePostPaidInstanceByEngineResponse response =
client.createPostPaidInstanceByEngine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Creating a RabbitMQ instance with AMQP-0-9-1, amqp.b1.large.1, and 100 GB

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

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

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

public class CreatePostPaidInstanceByEngineSolution {

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

        ICredential auth = new BasicCredentials()
```

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```
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        RabbitMQClient client = RabbitMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
            .build();
        CreatePostPaidInstanceByEngineRequest request = new
CreatePostPaidInstanceByEngineRequest();

request.withEngine(CreatePostPaidInstanceByEngineRequest.EngineEnum.fromValue("{engine}"));
        CreateInstanceReq body = new CreateInstanceReq();
        List<String> listbodyAvailableZones = new ArrayList<>();
        listbodyAvailableZones.add("9f1c5806706d4c1fb0eb72f0a9b18c77");
        body.withEnterpriseProjectId("0");

body.withStorageSpecCode(CreateInstanceReq.StorageSpecCodeEnum.fromValue("dms.physical.storag
e.high.v2"));
        body.withSslEnable(false);
        body.withEnablePublicip(false);
        body.withBrokerNum(CreateInstanceReq.BrokerNumEnum.NUMBER_1);
        body.withProductId("amqp.b1.large.1");
        body.withAvailableZones(listbodyAvailableZones);
        body.withSubnetId("89c1cb26-787b-4d66-a6e4-1bd887f19183");
        body.withSecurityGroupId("030f635d-b407-4ffb-b530-6b4eaf8edc03");
        body.withVpcId("05590544-f553-4158-be38-c791589ad303");
        body.withStorageSpace(100);
        body.withEnableAcl(true);
        body.withEngineVersion("AMQP-0-9-1");
        body.withEngine(CreateInstanceReq.EngineEnum.fromValue("RabbitMQ"));
        body.withDescription("");
        body.withName("rabbitmq-aor-demo");
        request.withBody(body);
        try {
            CreatePostPaidInstanceByEngineResponse response =
client.createPostPaidInstanceByEngine(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Creating a pay-per-use RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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```
    # In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreatePostPaidInstanceByEngineRequest()
        request.engine = "{engine}"
        listAvailableZonesbody = [
            "d573142f24894ef3bd3664de068b44b0"
        ]
        request.body = CreateInstanceReq(
            storage_spec_code="dms.physical.storage.high.v2",
            ssl_enable=False,
            publicip_id="",
            enable_publicip=False,
            product_id="c6.2u4g.single",
            available_zones=listAvailableZonesbody,
            subnet_id="b5fa806c-35e7-4299-b659-b39398dd4718",
            security_group_id="0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8",
            vpc_id="1e93f86e-13af-46c8-97d6-d40fa62b76c2",
            password="******",
            access_user="******",
            storage_space=100,
            engine_version="3.8.35",
            engine="RabbitMQ",
            description="",
            name="rabbitmq-demo"
        )
        response = client.create_post_paid_instance_by_engine(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Creating a yearly/monthly RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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

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

    try:
        request = CreatePostPaidInstanceByEngineRequest()
        request.engine = "{engine}"
        bssParambody = BssParam(
            charging_mode="prePaid",
            is_auto_pay=True,
            period_type="month",
            period_num=1
        )
        listAvailableZonesbody = [
            "d573142f24894ef3bd3664de068b44b0"
        ]
        request.body = CreateInstanceReq(
            bss_param=bssParambody,
            storage_spec_code="dms.physical.storage.high.v2",
            ssl_enable=False,
            publicip_id="",
            enable_publicip=False,
            product_id="c6.2u4g.single",
            available_zones=listAvailableZonesbody,
            subnet_id="b5fa806c-35e7-4299-b659-b39398dd4718",
            security_group_id="0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8",
            vpc_id="1e93f86e-13af-46c8-97d6-d40fa62b76c2",
            password="******",
            access_user="******",
            storage_space=100,
            engine_version="3.8.35",
            engine="RabbitMQ",
            description="",
            name="rabbitmq-demo"
        )
        response = client.create_post_paid_instance_by_engine(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Creating a RabbitMQ instance with AMQP-0-9-1, amqp.b1.large.1, and 100 GB

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = RabbitMQClient.new_builder() \
        .with_credentials(credentials) \
```

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```
        .with_region(RabbitMQRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreatePostPaidInstanceByEngineRequest()
        request.engine = "{engine}"
        listAvailableZonesbody = [
            "9f1c5806706d4c1fb0eb72f0a9b18c77"
        ]
        request.body = CreateInstanceReq(
            enterprise_project_id="0",
            storage_spec_code="dms.physical.storage.high.v2",
            ssl_enable=False,
            enable_publicip=False,
            broker_num=1,
            product_id="amqp.b1.large.1",
            available_zones=listAvailableZonesbody,
            subnet_id="89c1cb26-787b-4d66-a6e4-1bd887f19183",
            security_group_id="030f635d-b407-4ffb-b530-6b4eaf8edc03",
            vpc_id="05590544-f553-4158-be38-c791589ad303",
            storage_space=100,
            enable_acl=True,
            engine_version="AMQP-0-9-1",
            engine="RabbitMQ",
            description="",
            name="rabbitmq-aor-demo"
        )
        response = client.create_post_paid_instance_by_engine(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Creating a pay-per-use RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
```

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```
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

    request := &model.CreatePostPaidInstanceByEngineRequest{}
    request.Engine = model.GetCreatePostPaidInstanceByEngineRequestEngineEnum().ENGINE
    var listAvailableZonesbody = []string{
        "d573142f24894ef3bd3664de068b44b0",
    }
    sslEnableCreateInstanceReq:= false
    publicipIdCreateInstanceReq:= ""
    enablePublicipCreateInstanceReq:= false
    passwordCreateInstanceReq:= "******"
    accessUserCreateInstanceReq:= "******"
    descriptionCreateInstanceReq:= ""
    request.Body = &model.CreateInstanceReq{
        StorageSpecCode:
model.GetCreateInstanceReqStorageSpecCodeEnum().DMS_PHYSICAL_STORAGE_HIGH,
        SslEnable: &sslEnableCreateInstanceReq,
        PublicipId: &publicipIdCreateInstanceReq,
        EnablePublicip: &enablePublicipCreateInstanceReq,
        ProductId: "c6.2u4g.single",
        AvailableZones: listAvailableZonesbody,
        SubnetId: "b5fa806c-35e7-4299-b659-b39398dd4718",
        SecurityGroupId: "0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8",
        VpcId: "1e93f86e-13af-46c8-97d6-d40fa62b76c2",
        Password: &passwordCreateInstanceReq,
        AccessUser: &accessUserCreateInstanceReq,
        StorageSpace: int32(100),
        EngineVersion: "3.8.35",
        Engine: model.GetCreateInstanceReqEngineEnum().RABBIT_MQ,
        Description: &descriptionCreateInstanceReq,
        Name: "rabbitmq-demo",
    }
    response, err := client.CreatePostPaidInstanceByEngine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Creating a yearly/monthly RabbitMQ instance whose version is 3.8.35, specifications are 2 vCPUs | 4 GB x 1, and storage space is 100 GB

```
package main

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

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

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

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```
        Build()

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreatePostPaidInstanceByEngineRequest{}
    request.Engine = model.GetCreatePostPaidInstanceByEngineRequestEngineEnum().ENGINE
    chargingModeBssParam:= model.GetBssParamChargingModeEnum().PRE_PAID
    isAutoPayBssParam:= true
    periodTypeBssParam:= model.GetBssParamPeriodTypeEnum().MONTH
    periodNumBssParam:= int32(1)
    bssParambody := &model.BssParam{
        ChargingMode: &chargingModeBssParam,
        IsAutoPay: &isAutoPayBssParam,
        PeriodType: &periodTypeBssParam,
        PeriodNum: &periodNumBssParam,
    }
    var listAvailableZonesbody = []string{
        "d573142f24894ef3bd3664de068b44b0",
    }
    sslEnableCreateInstanceReq:= false
    publicipIdCreateInstanceReq:= ""
    enablePublicipCreateInstanceReq:= false
    passwordCreateInstanceReq:= "******"
    accessUserCreateInstanceReq:= "******"
    descriptionCreateInstanceReq:= ""
    request.Body = &model.CreateInstanceReq{
        BssParam: bssParambody,
        StorageSpecCode:
model.GetCreateInstanceReqStorageSpecCodeEnum().DMS_PHYSICAL_STORAGE_HIGH,
        SslEnable: &sslEnableCreateInstanceReq,
        PublicipId: &publicipIdCreateInstanceReq,
        EnablePublicip: &enablePublicipCreateInstanceReq,
        ProductId: "c6.2u4g.single",
        AvailableZones: listAvailableZonesbody,
        SubnetId: "b5fa806c-35e7-4299-b659-b39398dd4718",
        SecurityGroupId: "0aaa0033-bf7f-4c41-a6c2-18cd04cad2c8",
        VpcId: "1e93f86e-13af-46c8-97d6-d40fa62b76c2",
        Password: &passwordCreateInstanceReq,
        AccessUser: &accessUserCreateInstanceReq,
        StorageSpace: int32(100),
        EngineVersion: "3.8.35",
        Engine: model.GetCreateInstanceReqEngineEnum().RABBIT_MQ,
        Description: &descriptionCreateInstanceReq,
        Name: "rabbitmq-demo",
    }
    response, err := client.CreatePostPaidInstanceByEngine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Creating a RabbitMQ instance with AMQP-0-9-1, amqp.b1.large.1, and 100 GB

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreatePostPaidInstanceByEngineRequest{}
    request.Engine = model.GetCreatePostPaidInstanceByEngineRequestEngineEnum().ENGINE
    var listAvailableZonesbody = []string{
        "9f1c5806706d4c1fb0eb72f0a9b18c77",
    }
    enterpriseProjectIdCreateInstanceReq:= "0"
    sslEnableCreateInstanceReq:= false
    enablePublicipCreateInstanceReq:= false
    brokerNumCreateInstanceReq:= model.GetCreateInstanceReqBrokerNumEnum().E_1
    enableAclCreateInstanceReq:= true
    descriptionCreateInstanceReq:= ""
    request.Body = &model.CreateInstanceReq{
        EnterpriseProjectId: &enterpriseProjectIdCreateInstanceReq,
        StorageSpecCode: model.GetCreateInstanceReqStorageSpecCodeEnum().DMS_PHYSICAL_STORAGE_HIGH,
        SslEnable: &sslEnableCreateInstanceReq,
        EnablePublicip: &enablePublicipCreateInstanceReq,
        BrokerNum: &brokerNumCreateInstanceReq,
        ProductId: "amqp.b1.large.1",
        AvailableZones: listAvailableZonesbody,
        SubnetId: "89c1cb26-787b-4d66-a6e4-1bd887f19183",
        SecurityGroupId: "030f635d-b407-4ffb-b530-6b4eaf8edc03",
        VpcId: "05590544-f553-4158-be38-c791589ad303",
        StorageSpace: int32(100),
        EnableAcl: &enableAclCreateInstanceReq,
        EngineVersion: "AMQP-0-9-1",
        Engine: model.GetCreateInstanceReqEngineEnum().RABBIT_MQ,
        Description: &descriptionCreateInstanceReq,
        Name: "rabbitmq-aor-demo",
    }
    response, err := client.CreatePostPaidInstanceByEngine(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Instance 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.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances

Table 5-6 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.

Table 5-7 Query Parameters

Parameter	Mandatory	Type	Description
engine	Yes	String	Message engine type. The value is **rabbitmq**.
name	No	String	Instance name.
instance_id	No	String	Instance ID.
status	No	String	Instance status. For details, see **Instance Status**.

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Parameter	Mandatory	Type	Description
include_failure	No	String	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.
exact_match_name	No	String	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.
enterprise_project_id	No	String	Enterprise project ID.
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 instances returned in the current query. The default value is **10**. The value ranges from 1 to 50.

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-8 Response body parameters

Parameter	Type	Description
instances	Array of **ShowInstanceResp** objects	Instance list.
instance_num	Integer	Number of instances.

Table 5-9 ShowInstanceResp

Parameter	Type	Description
access_user	String	The username must be 4 to 64 characters long and can contain only letters, digits, and hyphens (-).
broker_num	Integer	Number of brokers.
name	String	Instance name.
engine	String	Message engine.
engine_version	String	Version of the message engine.
specification	String	Instance specifications. • 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	Message storage space in GB.
used_storage_space	Integer	Used message storage space in GB.
dns_enable	Boolean	Whether to enable domain name access to an instance. • **true**: yes • **false**: no
connect_address	String	IP address for private access to an instance.
connect_domain_name	String	Domain name for private access to an instance.
public_connect_address	String	IP address for public access to an instance.

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Parameter	Type	Description
public_connect_domain_name	String	Domain name for public access to an instance.
port	Integer	Port of an instance.
status	String	Instance status.
description	String	Instance description
instance_id	String	Instance ID.

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Parameter	Type	Description
resource_spec_code	String	Resource specifications. • **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

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Parameter	Type	Description
		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	Billing mode. The value **1** means pay-per-use, and **0** means yearly/monthly.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.
created_at	String	Time when an 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.
user_id	String	User ID.
user_name	String	Username.
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 to enable public access for the RabbitMQ instance. • **true**: enable • **false**: disable
publicip_address	String	EIP bound to the RabbitMQ instance. The value of this parameter is **null** if public access is disabled.
publicip_id	String	ID of the EIP bound to the RabbitMQ instance. The value of this parameter is **null** if public access is disabled.
management_connect_address	String	Management address of a RabbitMQ instance.

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Parameter	Type	Description
management_connect_domain_name	String	Management domain name of a RabbitMQ instance.
public_management_connect_address	String	Public management address of a RabbitMQ instance.
public_management_connect_domain_name	String	Public management domain name of a RabbitMQ instance.
ssl_enable	Boolean	Whether security authentication is enabled. • **true**: enabled • **false**: disabled
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. • **true**: New instance, which allows dynamic disk capacity expansion without restarting the instance. • **false**: old instance
extend_times	Integer	Number of disk expansion times. If the value exceeds 20, disk expansion is no longer allowed.
type	String	Instance type. The value can be **cluster**.
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 nodes belong. The AZ ID is returned.
available_zone_names	Array of strings	Indicates the AZ name to which the instance node belongs. The AZ name is returned.

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Parameter	Type	Description
total_storage_space	Integer	Message storage space in GB.
storage_resource_id	String	Storage resource ID.
storage_spec_code	String	I/O specifications.
ipv6_enable	Boolean	Whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	IPv6 connection address.
tags	Array of **TagEntity** objects	Tag list.

Table 5-10 TagEntity

Parameter	Type	Description
key	String	Tag key. • Must be specified. • Must be unique for the same instance. • Can contain 1 to 128 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@ • Cannot start with _sys_ • Cannot start or end with a space.
value	String	Tag value. • Can contain 0 to 255 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@

Example Requests

Listing all instances

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

Example Responses

Status code: 200

All instances are listed successfully.

```
{
  "instances" : [ {
```

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```
    "name" : "api-explorer",
    "engine" : "rabbitmq",
    "port" : 5672,
    "status" : "RUNNING",
    "type" : "single",
    "specification" : "2vCPUs 4GB",
    "engine_version" : "3.8.35",
    "connect_address" : "192.168.0.74",
    "instance_id" : "de873040-d661-4770-aa96-9329c71d7c8a",
    "resource_spec_code" : "dms.instance.rabbitmq.single.c3.2u4g",
    "charging_mode" : 1,
    "vpc_id" : "40a6501e-85ca-4449-a0db-b8bc7f0cec28",
    "vpc_name" : "vpc-a400",
    "created_at" : "1590047080687",
    "product_id" : "00300-30109-0--0",
    "security_group_id" : "bfd68e26-f8ef-4a91-a373-0a8f5c198601",
    "security_group_name" : "Sys-default",
    "subnet_id" : "a7f9a564-30dd-4059-8124-364ca6554578",
    "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
    "available_zone_names" : [ "AZ1" ],
    "user_id" : "3df5acbc24a54fadb62a043c9000a307",
    "user_name" : "********",
    "maintain_begin" : "22:00:00",
    "maintain_end" : "02:00:00",
    "storage_space" : 88,
    "total_storage_space" : 100,
    "used_storage_space" : 4,
    "enable_publicip" : false,
    "ssl_enable" : false,
    "management_connect_address" : "http://192.168.0.74:15672",
    "storage_resource_id" : "52be287d-1d6a-4d30-937e-185b3f176fc4",
    "storage_spec_code" : "dms.physical.storage.normal",
    "enterprise_project_id" : "0",
    "tags" : [ {
      "key" : "key1",
      "value" : "value1"
    }, {
      "key" : "key2",
      "value" : "value2"
    } ],
    "is_logical_volume" : true,
    "extend_times" : 0,
    "ipv6_enable" : false,
    "ipv6_connect_addresses" : [ ]
  } ],
  "instance_num" : 1
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListInstancesDetailsSolution {
```

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListInstancesDetailsRequest request = new ListInstancesDetailsRequest();
        try {
            ListInstancesDetailsResponse response = client.listInstancesDetails(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListInstancesDetailsRequest()
        response = client.list_instances_details(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

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

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	All instances are listed successfully.

Error Codes

See **Error Codes**.

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5.1.3 Querying an Instance

Function

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

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}

Table 5-11 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-12 Response body parameters

Parameter	Type	Description
access_user	String	The username must be 4 to 64 characters long and can contain only letters, digits, and hyphens (-).
broker_num	Integer	Number of brokers.
name	String	Instance name.
engine	String	Message engine.
engine_version	String	Version of the message engine.

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Parameter	Type	Description
specification	String	Instance specifications. • 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	Message storage space in GB.
used_storage_space	Integer	Used message storage space in GB.
dns_enable	Boolean	Whether to enable domain name access to an instance. • **true**: yes • **false**: no
connect_address	String	IP address for private access to an instance.
connect_domain_name	String	Domain name for private access to an instance.
public_connect_address	String	IP address for public access to an instance.
public_connect_domain_name	String	Domain name for public access to an instance.
port	Integer	Port of an instance.
status	String	Instance status.
description	String	Instance description
instance_id	String	Instance ID.

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Parameter	Type	Description
resource_spec_code	String	Resource specifications. • **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

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Parameter	Type	Description
		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	Billing mode. The value **1** means pay-per-use, and **0** means yearly/monthly.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.
created_at	String	Time when an 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.
user_id	String	User ID.
user_name	String	Username.
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 to enable public access for the RabbitMQ instance. • **true**: enable • **false**: disable
publicip_address	String	EIP bound to the RabbitMQ instance. The value of this parameter is **null** if public access is disabled.
publicip_id	String	ID of the EIP bound to the RabbitMQ instance. The value of this parameter is **null** if public access is disabled.
management_connect_address	String	Management address of a RabbitMQ instance.

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Parameter	Type	Description
management_connect_domain_name	String	Management domain name of a RabbitMQ instance.
public_management_connect_address	String	Public management address of a RabbitMQ instance.
public_management_connect_domain_name	String	Public management domain name of a RabbitMQ instance.
ssl_enable	Boolean	Whether security authentication is enabled. • **true**: enabled • **false**: disabled
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. • **true**: New instance, which allows dynamic disk capacity expansion without restarting the instance. • **false**: old instance
extend_times	Integer	Number of disk expansion times. If the value exceeds 20, disk expansion is no longer allowed.
type	String	Instance type. The value can be **cluster**.
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 nodes belong. The AZ ID is returned.
available_zone_names	Array of strings	Indicates the AZ name to which the instance node belongs. The AZ name is returned.

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Parameter	Type	Description
total_storage_space	Integer	Message storage space in GB.
storage_resource_id	String	Storage resource ID.
storage_spec_code	String	I/O specifications.
ipv6_enable	Boolean	Whether IPv6 is enabled.
ipv6_connect_addresses	Array of strings	IPv6 connection address.
tags	Array of **TagEntity** objects	Tag list.

Table 5-13 TagEntity

Parameter	Type	Description
key	String	Tag key. • Must be specified. • Must be unique for the same instance. • Can contain 1 to 128 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@ • Cannot start with _sys_ • Cannot start or end with a space.
value	String	Tag value. • Can contain 0 to 255 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@

Example Requests

Querying details of a specified instance

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

Example Responses

Status code: 200

The specified instance is queried successfully.

```
{
  "name" : "api-explorer",
```

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```
 "engine" : "rabbitmq",
 "port" : 5672,
 "status" : "RUNNING",
 "type" : "single",
 "specification" : "2vCPUs 4GB",
 "engine_version" : "3.8.35",
 "connect_address" : "192.168.0.74",
 "instance_id" : "de873040-d661-4770-aa96-9329c71d7c8a",
 "resource_spec_code" : "dms.instance.rabbitmq.single.c3.2u4g",
 "charging_mode" : 1,
 "vpc_id" : "40a6501e-85ca-4449-a0db-b8bc7f0cec28",
 "vpc_name" : "vpc-a400",
 "created_at" : "1590047080687",
 "product_id" : "00300-30109-0--0",
 "security_group_id" : "bfd68e26-f8ef-4a91-a373-0a8f5c198601",
 "security_group_name" : "Sys-default",
 "subnet_id" : "a7f9a564-30dd-4059-8124-364ca6554578",
 "available_zones" : [ "9f1c5806706d4c1fb0eb72f0a9b18c77" ],
 "available_zone_names" : [ "AZ1" ],
 "user_id" : "3df5acbc24a54fadb62a043c9000a307",
 "user_name" : "paas_dms_01",
 "maintain_begin" : "22:00:00",
 "maintain_end" : "02:00:00",
 "storage_space" : 88,
 "total_storage_space" : 100,
 "used_storage_space" : 4,
 "enable_publicip" : false,
 "ssl_enable" : false,
 "management_connect_address" : "http://192.168.0.74:15672",
 "storage_resource_id" : "52be287d-1d6a-4d30-937e-185b3f176fc4",
 "storage_spec_code" : "dms.physical.storage.normal",
 "enterprise_project_id" : "0",
 "tags" : [ {
   "key" : "key1",
   "value" : "value1"
 }, {
   "key" : "key2",
   "value" : "value2"
 } ],
 "is_logical_volume" : true,
 "extend_times" : 0,
 "ipv6_enable" : false,
 "ipv6_connect_addresses" : [ ],
 "broker_num" : 1,
 "access_user" : "root_01"
}
```


SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowInstanceSolution {

    public static void main(String[] args) {
```

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowInstanceRequest request = new ShowInstanceRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowInstanceResponse response = client.showInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowInstanceRequest()
        request.instance_id = "{instance_id}"
        response = client.show_instance(request)
        print(response)
```

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

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The specified instance is queried successfully.

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Error Codes

See **Error Codes**.

5.1.4 Deleting an Instance

Function

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

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

None

Response Parameters

None

Example Requests

Deleting an instance

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteInstanceRequest request = new DeleteInstanceRequest();
        request.withInstanceId("{instance_id}");
        try {
            DeleteInstanceResponse response = client.deleteInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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

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

    try:
        request = DeleteInstanceRequest()
        request.instance_id = "{instance_id}"
        response = client.delete_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
204	The 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.

Calling Method

For details, see **Calling APIs**.

URI

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

Table 5-15 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-16 Request body parameters

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

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Parameter	Mandatory	Type	Description
description	No	String	Description of an instance. The description supports up to 1024 characters. **NOTE** 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 window starts. The format is HH:mm:ss. • 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 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00. • 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 02:00:00.

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Parameter	Mandatory	Type	Description
maintain_end	No	String	Time at which the maintenance window ends. The format is HH:mm:ss. • 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 22:00:00, the end time is 02:00:00. • 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 06:00:00.
security_group_id	No	String	Security group ID. To obtain it, log in to the VPC console and view the security group ID on the security group details page.
enable_publicip	No	Boolean	Whether to enable public access for the RabbitMQ instance. • **true**: enable • **false**: disable
publicip_id	No	String	ID of the EIP bound to a RabbitMQ instance. This parameter is mandatory if public access is enabled (that is, **enable_publicip** is set to **true**). Method: Log in to the Network Console, go to the **EIPs** page, click the specified EIP, and find the ID in the **Basic Information** area.
enterprise_project_id	No	String	Enterprise project.

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Parameter	Mandatory	Type	Description
enable_acl	No	Boolean	ACL (only for RabbitMQ AMQP).

Response Parameters

None

Example Requests

- Modifying the name and description of an instance.

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

{
  "name" : "rabbitmq-01",
  "description" : "instance description"
}
```

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

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

{
  "name" : "rabbitmq-01",
  "description" : "instance description",
  "maintain_begin" : "02:00:00",
  "maintain_end" : "06:00:00"
}
```

- Enabling public network access

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

{
  "enable_publicip" : true,
  "publicip_id" : "32685c2b-xxxx-xxxx-86c6-a1902359xxxx"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

- Modifying the name and description of an instance.

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

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

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```
public class UpdateInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateInstanceRequest request = new UpdateInstanceRequest();
        request.withInstanceId("{instance_id}");
        UpdateInstanceReq body = new UpdateInstanceReq();
        body.withDescription("instance description");
        body.withName("rabbitmq-01");
        request.withBody(body);
        try {
            UpdateInstanceResponse response = client.updateInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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

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

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


public class UpdateInstanceSolution {

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

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateInstanceRequest request = new UpdateInstanceRequest();
        request.withInstanceId("{instance_id}");
        UpdateInstanceReq body = new UpdateInstanceReq();
        body.withMaintainEnd("06:00:00");
        body.withMaintainBegin("02:00:00");
        body.withDescription("instance description");
        body.withName("rabbitmq-01");
        request.withBody(body);
        try {
            UpdateInstanceResponse response = client.updateInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Enabling public network access

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

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


public class UpdateInstanceSolution {

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

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

```
        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateInstanceRequest request = new UpdateInstanceRequest();
        request.withInstanceId("{instance_id}");
        UpdateInstanceReq body = new UpdateInstanceReq();
        body.withPublicipId("32685c2b-xxxx-xxxx-86c6-a1902359xxxx");
        body.withEnablePublicip(true);
        request.withBody(body);
        try {
            UpdateInstanceResponse response = client.updateInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Modifying the name and description of an instance.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateInstanceRequest()
        request.instance_id = "{instance_id}"
        request.body = UpdateInstanceReq(
            description="instance description",
            name="rabbitmq-01"
        )
        response = client.update_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

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

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateInstanceRequest()
        request.instance_id = "{instance_id}"
        request.body = UpdateInstanceReq(
            maintain_end="06:00:00",
            maintain_begin="02:00:00",
            description="instance description",
            name="rabbitmq-01"
        )
        response = client.update_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Enabling public network access

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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

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

try:
    request = UpdateInstanceRequest()
    request.instance_id = "{instance_id}"
    request.body = UpdateInstanceReq(
        publicip_id="32685c2b-xxxx-xxxx-86c6-a1902359xxxx",
        enable_publicip=True
    )
    response = client.update_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- Modifying the name and description of an instance.

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceRequest{}
    request.InstanceId = "{instance_id}"
    descriptionUpdateInstanceReq:= "instance description"
    nameUpdateInstanceReq:= "rabbitmq-01"
    request.Body = &model.UpdateInstanceReq{
        Description: &descriptionUpdateInstanceReq,
        Name: &nameUpdateInstanceReq,
    }
    response, err := client.UpdateInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
```

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```
        fmt.Println(err)
    }
}
```

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

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceRequest{}
    request.InstanceId = "{instance_id}"
    maintainEndUpdateInstanceReq:= "06:00:00"
    maintainBeginUpdateInstanceReq:= "02:00:00"
    descriptionUpdateInstanceReq:= "instance description"
    nameUpdateInstanceReq:= "rabbitmq-01"
    request.Body = &model.UpdateInstanceReq{
        MaintainEnd: &maintainEndUpdateInstanceReq,
        MaintainBegin: &maintainBeginUpdateInstanceReq,
        Description: &descriptionUpdateInstanceReq,
        Name: &nameUpdateInstanceReq,
    }
    response, err := client.UpdateInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Enabling public network access

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceRequest{}
    request.InstanceId = "{instance_id}"
    publicipIdUpdateInstanceReq:= "32685c2b-xxxx-xxxx-86c6-a1902359xxxx"
    enablePublicipUpdateInstanceReq:= true
    request.Body = &model.UpdateInstanceReq{
        PublicipId: &publicipIdUpdateInstanceReq,
        EnablePublicip: &enablePublicipUpdateInstanceReq,
    }
    response, err := client.UpdateInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The instance is modified successfully.

Error Codes

See **Error Codes**.

5.1.6 Batch Deleting Instances

Function

This API is used to delete instances in batches.

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

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{project_id}/instances/action

Table 5-17 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.

Request Parameters

Table 5-18 Request body parameters

Parameter	Mandatory	Type	Description
instances	No	Array of strings	List of instance IDs.
action	Yes	String	Operation to be performed on instances. Value: **delete**.
all_failure	No	String	Whether to delete instances that fail to be created. If this parameter is set to **rabbitmq**, all instances that fail to be created are deleted. In this case, the **instances** parameter in the request can be empty.

Response Parameters

Status code: 200

Table 5-19 Response body parameters

Parameter	Type	Description
results	Array of **results** objects	Result of instance modification.

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Table 5-20 results

Parameter	Type	Description
result	String	Operation result: • **success**: The operation succeeded. • **failed**: The operation failed.
instance	String	Instance ID.

Example Requests

- 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",
  "all_failure" : "rabbitmq"
}
```

Example Responses

Status code: 200

Instances deleted.

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

SDK Sample Code

The SDK sample code is as follows.

Java

- Deleting instances in batches

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

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

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

public class BatchRestartOrDeleteInstancesSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchRestartOrDeleteInstancesRequest request = new BatchRestartOrDeleteInstancesRequest();
        BatchRestartOrDeleteInstanceReq body = new BatchRestartOrDeleteInstanceReq();
        List<String> listbodyInstances = new ArrayList<>();
        listbodyInstances.add("54602a9d-5e22-4239-9123-77e350df4a34");
        listbodyInstances.add("7166cdea-dbad-4d79-9610-7163e6f8b640");
        body.withAction(BatchRestartOrDeleteInstanceReq.ActionEnum.fromValue("delete"));
        body.withInstances(listbodyInstances);
        request.withBody(body);
        try {
            BatchRestartOrDeleteInstancesResponse response = client.batchRestartOrDeleteInstances(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Deleting all instances that fail to be created

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

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


public class BatchRestartOrDeleteInstancesSolution {

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

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```
        // In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchRestartOrDeleteInstancesRequest request = new BatchRestartOrDeleteInstancesRequest();
        BatchRestartOrDeleteInstanceReq body = new BatchRestartOrDeleteInstanceReq();
        body.withAllFailure(BatchRestartOrDeleteInstanceReq.AllFailureEnum.fromValue("rabbitmq"));
        body.withAction(BatchRestartOrDeleteInstanceReq.ActionEnum.fromValue("delete"));
        request.withBody(body);
        try {
            BatchRestartOrDeleteInstancesResponse response =
client.batchRestartOrDeleteInstances(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Deleting instances in batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
```

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```
        request = BatchRestartOrDeleteInstancesRequest()
        listInstancesbody = [
            "54602a9d-5e22-4239-9123-77e350df4a34",
            "7166cdea-dbad-4d79-9610-7163e6f8b640"
        ]
        request.body = BatchRestartOrDeleteInstanceReq(
            action="delete",
            instances=listInstancesbody
        )
        response = client.batch_restart_or_delete_instances(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Deleting all instances that fail to be created

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = BatchRestartOrDeleteInstancesRequest()
        request.body = BatchRestartOrDeleteInstanceReq(
            all_failure="rabbitmq",
            action="delete"
        )
        response = client.batch_restart_or_delete_instances(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Deleting instances in batches

```
package main

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

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```
)

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

- Deleting all instances that fail to be created

```
package main

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

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

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

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```
    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchRestartOrDeleteInstancesRequest{}
    allFailureBatchRestartOrDeleteInstanceReq:=
model.GetBatchRestartOrDeleteInstanceReqAllFailureEnum().RABBITMQ
    request.Body = &model.BatchRestartOrDeleteInstanceReq{
        AllFailure: &allFailureBatchRestartOrDeleteInstanceReq,
        Action: model.GetBatchRestartOrDeleteInstanceReqActionEnum().DELETE,
    }
    response, err := client.BatchRestartOrDeleteInstances(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Instances deleted.
204	All RabbitMQ instances that fail to be created are deleted successfully.

Error Codes

See **Error Codes**.

5.1.7 Enabling Domain Name Access to a RabbitMQ Instance

Function

A client can access a RabbitMQ instance with domain name access enabled using a domain name.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{project_id}/rabbitmq/instances/{instance_id}/dns

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Table 5-21 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID, which can be obtained from **Querying All Instances**.

Request Parameters

None

Response Parameters

Status code: 400

Table 5-22 Response body parameters

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

Example Requests

Enabling domain name access to a RabbitMQ instance

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

Example Responses

Status code: 400

Failed

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

SDK Sample Code

The SDK sample code is as follows.

Java

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

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

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```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.rabbitmq.v2.region.RabbitMQRegion;
import com.huaweicloud.sdk.rabbitmq.v2.*;
import com.huaweicloud.sdk.rabbitmq.v2.model.*;


public class EnableDnsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        EnableDnsRequest request = new EnableDnsRequest();
        request.withInstanceId("{instance_id}");
        try {
            EnableDnsResponse response = client.enableDns(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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

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

    try:
        request = EnableDnsRequest()
        request.instance_id = "{instance_id}"
        response = client.enable_dns(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
204	Successful
400	Failed

Error Codes

See **Error Codes**.

5.2 Instance Management

5.2.1 Resetting the Password

Function

This API is used to reset the password.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{project_id}/instances/{instance_id}/password

Table 5-23 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

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Request Parameters

Table 5-24 Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	Use 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters`~!@#$%^&*()-_=+|[{}];:'",<.>/? and spaces, and cannot start with a hyphen (-).

Response Parameters

None

Example Requests

Resetting a password

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

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Resetting a password

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

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


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```
public class ResetPasswordSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResetPasswordRequest request = new ResetPasswordRequest();
        request.withInstanceId("{instance_id}");
        ResetPasswordReq body = new ResetPasswordReq();
        body.withNewPassword("******");
        request.withBody(body);
        try {
            ResetPasswordResponse response = client.resetPassword(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Resetting a password

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = RabbitMQClient.new_builder() \
```

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

    try:
        request = ResetPasswordRequest()
        request.instance_id = "{instance_id}"
        request.body = ResetPasswordReq(
            new_password="******"
        )
        response = client.reset_password(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Resetting a password

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResetPasswordRequest{}
    request.InstanceId = "{instance_id}"
    newPasswordResetPasswordReq:= "******"
    request.Body = &model.ResetPasswordReq{
        NewPassword: &newPasswordResetPasswordReq,
    }
    response, err := client.ResetPassword(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The password is reset successfully.

Error Codes

See **Error Codes**.

5.2.2 Listing Plug-ins

Function

This API is used to list plug-ins.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}/rabbitmq/plugins

Table 5-25 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-26 Response body parameters

Parameter	Type	Description
plugins	Array of **PluginEntity** objects	Plug-in information list.

Table 5-27 PluginEntity

Parameter	Type	Description
running	Boolean	Whether the plug-in is running.
enable	Boolean	Whether the plug-in is enabled.
name	String	Plug-in name.
version	String	Plug-in version.

Example Requests

Querying the plug-in list

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

Example Responses

Status code: 200

The plug-ins are listed successfully.

```
{
  "plugins" : [ {
    "running" : true,
    "enable" : true,
    "name" : "rabbitmq_shovel",
    "version" : "3.8.35"
  }, {
    "running" : true,
    "enable" : true,
    "name" : "rabbitmq_consistent_hash_exchange",
    "version" : "3.8.35"
  }, {
    "running" : false,
    "enable" : false,
    "name" : "rabbitmq_federation",
    "version" : "3.8.35"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

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Java

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

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


public class ListPluginsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListPluginsRequest request = new ListPluginsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListPluginsResponse response = client.listPlugins(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListPluginsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_plugins(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The plug-ins are listed successfully.

Error Codes

See **Error Codes**.

5.2.3 Enabling or Disabling a Plug-in

Function

This API is used to enable or disable a plug-in.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v2/{project_id}/instances/{instance_id}/rabbitmq/plugins

Table 5-28 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-29 Request body parameters

Parameter	Mandatory	Type	Description
enable	No	Boolean	Whether to enable the plug-in.

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Parameter	Mandatory	Type	Description
plugins	No	String	Plug-ins. Separated multiple plug-ins with commas (,).

Response Parameters

Status code: 200

Table 5-30 Response body parameters

Parameter	Type	Description
job_id	String	Background task ID.

Example Requests

Enabling the rabbitmq_federation and rabbitmq_shovel plug-ins

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

{
  "enable" : true,
  "plugins" : "rabbitmq_federation,rabbitmq_shovel"
}
```

Example Responses

Status code: 200

The plug-in is enabled or disabled successfully.

```
{
  "job_id" : "8abfa7b27437db8f01744ea8ad4f245e"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Enabling the rabbitmq_federation and rabbitmq_shovel plug-ins

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

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

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```
public class UpdatePluginsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdatePluginsRequest request = new UpdatePluginsRequest();
        request.withInstanceId("{instance_id}");
        UpdatePluginsReq body = new UpdatePluginsReq();
        body.withPlugins("rabbitmq_federation,rabbitmq_shovel");
        body.withEnable(true);
        request.withBody(body);
        try {
            UpdatePluginsResponse response = client.updatePlugins(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Enabling the rabbitmq_federation and rabbitmq_shovel plug-ins

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = RabbitMQClient.new_builder() \
```

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

    try:
        request = UpdatePluginsRequest()
        request.instance_id = "{instance_id}"
        request.body = UpdatePluginsReq(
            plugins="rabbitmq_federation,rabbitmq_shovel",
            enable=True
        )
        response = client.update_plugins(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Enabling the rabbitmq_federation and rabbitmq_shovel plug-ins

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdatePluginsRequest{}
    request.InstanceId = "{instance_id}"
    pluginsUpdatePluginsReq:= "rabbitmq_federation,rabbitmq_shovel"
    enableUpdatePluginsReq:= true
    request.Body = &model.UpdatePluginsReq{
        Plugins: &pluginsUpdatePluginsReq,
        Enable: &enableUpdatePluginsReq,
    }
    response, err := client.UpdatePlugins(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
```

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The plug-in is enabled or disabled successfully.

Error Codes

See **Error Codes**.

5.3 Specification Modification Management

5.3.1 Querying Product Information for Specification Modification of Instances with New Flavors

Function

This API is used to query the product information for specification modification of instances with new flavors.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{engine}/{project_id}/instances/{instance_id}/extend

Table 5-31 Path Parameters

Parameter	Mandatory	Type	Description
engine	Yes	String	Message engine, which is **rabbitmq**.
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

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Table 5-32 Query Parameters

Parameter	Mandatory	Type	Description
type	No	String	Product edition. • **advanced**: the premium edition • **platinum**: the platinum edition • **dec**: the dedicated cloud edition • **exp**: the experience edition

Request Parameters

None

Response Parameters

Status code: 200

Table 5-33 Response body parameters

Parameter	Type	Description
engine	String	Message engine.
versions	Array of strings	Versions supported by the message engine.
products	Array of **RabbitMQExtendProductInfoEntity** objects	Product information for specification modification.

Table 5-34 RabbitMQExtendProductInfoEntity

Parameter	Type	Description
type	String	Instance type.
product_id	String	Product ID.
ecs_flavor_id	String	ECS flavor used by the product.
arch_types	Array of strings	Supported CPU architectures.
charging_mode	Array of strings	Supported billing modes.

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Parameter	Type	Description
ios	Array of **RabbitMQExtendProductIosEntity** objects	Disk I/O information.
properties	**RabbitMQExtendProductPropertiesEntity** object	Key-value pair of a feature.
available_zones	Array of strings	AZs where there are available resources.
unavailable_zones	Array of strings	AZs where resources are sold out.
support_features	Array of **RabbitMQProductSupportFeature-sEntity** objects	Supported features.

Table 5-35 RabbitMQExtendProductIosEntity

Parameter	Type	Description
io_spec	String	Storage I/O specification.
available_zones	Array of strings	AZs where there are available resources.
type	String	I/O type.
unavailable_zones	Array of strings	AZs where resources are sold out.

Table 5-36 RabbitMQExtendProductPropertiesEntity

Parameter	Type	Description
max_broker	String	Maximum number of brokers.
max_storage_per_node	String	Maximum storage space of each broker. Unit: GB.
min_broker	String	Minimum number of brokers.
min_storage_per_node	String	Minimum storage space of each broker. Unit: GB.
max_connection_per_broker	String	Maximum number of connections.
step_length	String	Increment.

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Parameter	Type	Description
product_alias	String	Alias of **product_id**.
max_queue_per_broker	String	Maximum number of queues.

Table 5-37 RabbitMQProductSupportFeaturesEntity

Parameter	Type	Description
name	String	Feature name.
properties	Map<String,String>	Key-value pair of a feature.

Example Requests

Querying product information for instance specification modification

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

Example Responses

Status code: 200

Successfully queried the product information for instance specification modification.

```
{
  "engine" : "rabbitmq",
  "versions" : [ "3.8.35" ],
  "products" : [ {
    "type" : "single",
    "product_id" : "c6.2u4g.single",
    "ecs_flavor_id" : "c6.large.2",
    "arch_types" : [ "X86" ],
    "charging_mode" : [ "monthly", "hourly" ],
    "ios" : [ {
      "io_spec" : "dms.physical.storage.ultra.v2",
      "available_zones" : [ "xxx" ],
      "type" : "evs",
      "unavailable_zones" : [ "xxx" ]
    }, {
      "io_spec" : "dms.physical.storage.high.v2",
      "available_zones" : [ "xxx" ],
      "type" : "evs",
      "unavailable_zones" : [ "xxx" ]
    } ],
    "support_features" : [ ],
    "properties" : {
      "max_connection_per_broker" : "2000",
      "max_broker" : "1",
      "max_queue_per_broker" : "100",
      "max_storage_per_node" : "30000",
      "min_broker" : "1",
      "product_alias" : "rabbitmq.2u4g.single",
      "step_length" : "0",
      "min_storage_per_node" : "100"
```

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```
    },
    "available_zones" : [ "xxx" ],
    "unavailable_zones" : [ ]
  }, {
    "type" : "single",
    "product_id" : "c6.4u8g.single",
    "ecs_flavor_id" : "c6.xlarge.2",
    "arch_types" : [ "X86" ],
    "charging_mode" : [ "monthly", "hourly" ],
    "ios" : [ {
      "io_spec" : "dms.physical.storage.high.v2",
      "available_zones" : [ "xxx" ],
      "type" : "evs",
      "unavailable_zones" : [ "xxx" ]
    }, {
      "io_spec" : "dms.physical.storage.ultra.v2",
      "available_zones" : [ "xxx" ],
      "type" : "evs",
      "unavailable_zones" : [ "xxx" ]
    } ],
    "support_features" : [ ],
    "properties" : {
      "max_connection_per_broker" : "3000",
      "max_broker" : "1",
      "max_queue_per_broker" : "200",
      "max_storage_per_node" : "30000",
      "min_broker" : "1",
      "product_alias" : "rabbitmq.4u8g.single",
      "step_length" : "0",
      "min_storage_per_node" : "100"
    },
    "available_zones" : [ "xxx" ],
    "unavailable_zones" : [ ]
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowEngineInstanceExtendProductInfoSolution {

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

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

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```
            .withAk(ak)
            .withSk(sk);

        RabbitMQClient client = RabbitMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowEngineInstanceExtendProductInfoRequest request = new
ShowEngineInstanceExtendProductInfoRequest();

request.withEngine(ShowEngineInstanceExtendProductInfoRequest.EngineEnum.fromValue("{engine}"));
        request.withInstanceId("{instance_id}");
        try {
            ShowEngineInstanceExtendProductInfoResponse response =
client.showEngineInstanceExtendProductInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowEngineInstanceExtendProductInfoRequest()
        request.engine = "{engine}"
        request.instance_id = "{instance_id}"
        response = client.show_engine_instance_extend_product_info(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowEngineInstanceExtendProductInfoRequest{}
    request.Engine = model.GetShowEngineInstanceExtendProductInfoRequestEngineEnum().ENGINE
    request.InstanceId = "{instance_id}"
    response, err := client.ShowEngineInstanceExtendProductInfo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successfully queried the product information for instance specification modification.

Error Codes

See **Error Codes**.

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5.3.2 Modifying Specifications of Instances with New Flavors

Function

This API is used to modify instance specifications.

Currently, this API can only be used to modify specifications of pay-per-use instances.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{engine}/{project_id}/instances/{instance_id}/extend

Table 5-38 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
engine	Yes	String	Message engine, which is **rabbitmq**.

Request Parameters

Table 5-39 Request body parameters

Parameter	Mandatory	Type	Description
oper_type	Yes	String	Change type. Value range: **storage**: Expand the storage without changing the broker quantity. **horizontal**: Add brokers without resizing the storage space of each broker. **vertical**: Scale up the broker flavor without changing the broker quantity and storage.

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Parameter	Mandatory	Type	Description
new_storage_space	No	Integer	New storage space. This parameter is valid and mandatory when **oper_type** is set to **storage** or **horizontal**. Instance storage space = Number of brokers x Storage space of each broker. If **oper_type** is set to **storage**, the number of brokers remains unchanged, and the storage space of each broker must be expanded by at least 100 GB. If **oper_type** is set to **horizontal**, the storage space of each broker remains unchanged.
new_product_id	No	String	Flavor, such as **c6.8u16g.cluster**. This parameter is valid and mandatory when **oper_type** is set to **vertical**.
new_broker_num	No	Integer	This parameter is valid only when **oper_type** is set to **horizontal**.
new_spec_code	No	String	Old flavor, such as **dms.instance.rabbitmq.cluster.c3.8u16g**. When **oper_type** is set to **horizontal**, the value is **dms.instance.rabbitmq.cluster.c3.8u16g.5** (5 is the broker quantity.)

Response Parameters

Status code: 200

Table 5-40 Response body parameters

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

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Example Requests

- Expanding the storage space (pay-per-use, old flavors). **new_spec_code** is the original specification.

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

{
  "new_storage_space" : 600,
  "oper_type" : "storage",
  "new_spec_code" : "dms.instance.rabbitmq.cluster.c3.2u4g.3"
}
```

- Adding brokers (pay-per-use, old flavors). **new_storage_space** is the space of the original specification. **new_spec_code** is **dms.instance.rabbitmq.cluster.c3.2u4g.5** (5 is the broker quantity.)

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

{
  "new_storage_space" : 600,
  "oper_type" : "horizontal",
  "new_spec_code" : "dms.instance.rabbitmq.cluster.c3.2u4g.5"
}
```

- Increasing broker flavors (pay-per-use, old flavors). For **new_spec_code**, replace the original specification with the new one. For example, replace 2u4g with 4u8g.

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

{
  "new_storage_space" : 600,
  "oper_type" : "vertical",
  "new_spec_code" : "dms.instance.rabbitmq.cluster.c3.2u4g.5"
}
```

- Expanding the storage space (pay-per-use)

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

{
  "new_storage_space" : 600,
  "oper_type" : "storage"
}
```

- Adding brokers (pay-per-use)

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

{
  "oper_type" : "horizontal",
  "new_storage_space" : 500,
  "new_broker_num" : 5
}
```

- Increasing the broker flavor (pay-per-use)

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

{
  "oper_type" : "vertical",
  "new_product_id" : "c6.4u8g.cluster"
}
```

Example Responses

Status code: 200

Instance specifications are modified successfully.

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

SDK Sample Code

The SDK sample code is as follows.

Java

- Expanding the storage space (pay-per-use, old flavors). **new_spec_code** is the original specification.

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

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


public class ResizeEngineInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewSpecCode("dms.instance.rabbitmq.cluster.c3.2u4g.3");
        body.withNewStorageSpace(600);
        body.withOperType("storage");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
```

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```
        }
    }
}
```

- Adding brokers (pay-per-use, old flavors). **new_storage_space** is the space of the original specification. **new_spec_code** is **dms.instance.rabbitmq.cluster.c3.2u4g.5** (5 is the broker quantity.)

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

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


public class ResizeEngineInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewSpecCode("dms.instance.rabbitmq.cluster.c3.2u4g.5");
        body.withNewStorageSpace(600);
        body.withOperType("horizontal");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Increasing broker flavors (pay-per-use, old flavors). For **new_spec_code**, replace the original specification with the new one. For example, replace 2u4g with 4u8g.

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

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


public class ResizeEngineInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewSpecCode("dms.instance.rabbitmq.cluster.c3.2u4g.5");
        body.withNewStorageSpace(600);
        body.withOperType("vertical");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Expanding the storage space (pay-per-use)

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

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

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```
public class ResizeEngineInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewStorageSpace(600);
        body.withOperType("storage");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Adding brokers (pay-per-use)

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

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


public class ResizeEngineInstanceSolution {

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

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewBrokerNum(5);
        body.withNewStorageSpace(500);
        body.withOperType("horizontal");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- Increasing the broker flavor (pay-per-use)

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

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


public class ResizeEngineInstanceSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
```

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```
            .withCredential(auth)
            .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
            .build();
        ResizeEngineInstanceRequest request = new ResizeEngineInstanceRequest();
        request.withInstanceId("{instance_id}");
        request.withEngine(ResizeEngineInstanceRequest.EngineEnum.fromValue("{engine}"));
        ResizeEngineInstanceReq body = new ResizeEngineInstanceReq();
        body.withNewProductId("c6.4u8g.cluster");
        body.withOperType("vertical");
        request.withBody(body);
        try {
            ResizeEngineInstanceResponse response = client.resizeEngineInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- Expanding the storage space (pay-per-use, old flavors). **new_spec_code** is the original specification.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_spec_code="dms.instance.rabbitmq.cluster.c3.2u4g.3",
            new_storage_space=600,
            oper_type="storage"
        )
        response = client.resize_engine_instance(request)
        print(response)
```

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

- Adding brokers (pay-per-use, old flavors). **new_storage_space** is the space of the original specification. **new_spec_code** is **dms.instance.rabbitmq.cluster.c3.2u4g.5** (5 is the broker quantity.)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_spec_code="dms.instance.rabbitmq.cluster.c3.2u4g.5",
            new_storage_space=600,
            oper_type="horizontal"
        )
        response = client.resize_engine_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Increasing broker flavors (pay-per-use, old flavors). For **new_spec_code**, replace the original specification with the new one. For example, replace 2u4g with 4u8g.

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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```
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_spec_code="dms.instance.rabbitmq.cluster.c3.2u4g.5",
            new_storage_space=600,
            oper_type="vertical"
        )
        response = client.resize_engine_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Expanding the storage space (pay-per-use)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_storage_space=600,
            oper_type="storage"
        )
        response = client.resize_engine_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

- Adding brokers (pay-per-use)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_broker_num=5,
            new_storage_space=500,
            oper_type="horizontal"
        )
        response = client.resize_engine_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- Increasing the broker flavor (pay-per-use)

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = RabbitMQClient.new_builder() \
```

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

    try:
        request = ResizeEngineInstanceRequest()
        request.instance_id = "{instance_id}"
        request.engine = "{engine}"
        request.body = ResizeEngineInstanceReq(
            new_product_id="c6.4u8g.cluster",
            oper_type="vertical"
        )
        response = client.resize_engine_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- Expanding the storage space (pay-per-use, old flavors). **new_spec_code** is the original specification.

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newSpecCodeResizeEngineInstanceReq:= "dms.instance.rabbitmq.cluster.c3.2u4g.3"
    newStorageSpaceResizeEngineInstanceReq:= int32(600)
    request.Body = &model.ResizeEngineInstanceReq{
        NewSpecCode: &newSpecCodeResizeEngineInstanceReq,
        NewStorageSpace: &newStorageSpaceResizeEngineInstanceReq,
        OperType: "storage",
    }
    response, err := client.ResizeEngineInstance(request)
```

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

- Adding brokers (pay-per-use, old flavors). **new_storage_space** is the space of the original specification. **new_spec_code** is **dms.instance.rabbitmq.cluster.c3.2u4g.5** (5 is the broker quantity.)

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newSpecCodeResizeEngineInstanceReq:= "dms.instance.rabbitmq.cluster.c3.2u4g.5"
    newStorageSpaceResizeEngineInstanceReq:= int32(600)
    request.Body = &model.ResizeEngineInstanceReq{
        NewSpecCode: &newSpecCodeResizeEngineInstanceReq,
        NewStorageSpace: &newStorageSpaceResizeEngineInstanceReq,
        OperType: "horizontal",
    }
    response, err := client.ResizeEngineInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Increasing broker flavors (pay-per-use, old flavors). For **new_spec_code**, replace the original specification with the new one. For example, replace 2u4g with 4u8g.

```
package main

import (
    "fmt"
```

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```
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rabbitmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2/region"
)

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newSpecCodeResizeEngineInstanceReq:= "dms.instance.rabbitmq.cluster.c3.2u4g.5"
    newStorageSpaceResizeEngineInstanceReq:= int32(600)
    request.Body = &model.ResizeEngineInstanceReq{
        NewSpecCode: &newSpecCodeResizeEngineInstanceReq,
        NewStorageSpace: &newStorageSpaceResizeEngineInstanceReq,
        OperType: "vertical",
    }
    response, err := client.ResizeEngineInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Expanding the storage space (pay-per-use)

```
package main

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

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newStorageSpaceResizeEngineInstanceReq:= int32(600)
    request.Body = &model.ResizeEngineInstanceReq{
        NewStorageSpace: &newStorageSpaceResizeEngineInstanceReq,
        OperType: "storage",
    }
    response, err := client.ResizeEngineInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- Adding brokers (pay-per-use)

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newBrokerNumResizeEngineInstanceReq:= int32(5)
    newStorageSpaceResizeEngineInstanceReq:= int32(500)
    request.Body = &model.ResizeEngineInstanceReq{
        NewBrokerNum: &newBrokerNumResizeEngineInstanceReq,
        NewStorageSpace: &newStorageSpaceResizeEngineInstanceReq,
        OperType: "horizontal",
```

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

- Increasing the broker flavor (pay-per-use)

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeEngineInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.Engine = model.GetResizeEngineInstanceRequestEngineEnum().ENGINE
    newProductIdResizeEngineInstanceReq:= "c6.4u8g.cluster"
    request.Body = &model.ResizeEngineInstanceReq{
        NewProductId: &newProductIdResizeEngineInstanceReq,
        OperType: "vertical",
    }
    response, err := client.ResizeEngineInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
200	Instance specifications are modified successfully.

Error Codes

See **Error Codes**.

5.4 Virtual Host Management

5.4.1 Creating a Virtual Host

Function

This API is used to create a virtual host.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts

Table 5-41 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-42 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Virtual host name.

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Response Parameters

None

Example Requests

Creating a virtual host

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

{
  "name" : "vhost-demo"
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a virtual host

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

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


public class CreateVhostSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateVhostRequest request = new CreateVhostRequest();
        request.withInstanceId("{instance_id}");
        CreateVhostBody body = new CreateVhostBody();
        body.withName("vhost-demo");
        request.withBody(body);
```

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```
        try {
            CreateVhostResponse response = client.createVhost(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Creating a virtual host

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateVhostRequest()
        request.instance_id = "{instance_id}"
        request.body = CreateVhostBody(
            name="vhost-demo"
        )
        response = client.create_vhost(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating a virtual host

```
package main

import (
    "fmt"
```

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```
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    rabbitmq "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/rabbitmq/v2/region"
)

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateVhostRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.CreateVhostBody{
        Name: "vhost-demo",
    }
    response, err := client.CreateVhost(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

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5.4.2 Querying Virtual Hosts

Function

This API is used to query virtual hosts.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts

Table 5-43 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Table 5-44 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records on each page. Value range: 0–50. The default value is 10.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-45 Response body parameters

Parameter	Type	Description
size	Integer	Number of displayed records.

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Parameter	Type	Description
total	Integer	Total number of results in a query.
items	Array of **ShowVhostDetailResp** objects	Queried virtual host details.

Table 5-46 ShowVhostDetailResp

Parameter	Type	Description
name	String	Virtual host name.
tracing	Boolean	Indicates whether to enable message tracing RabbitMQ AMQP does not have this field.

Example Requests

Querying virtual hosts

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

Example Responses

Status code: 200

Successful

```
{
  "size" : 10,
  "total" : 13,
  "items" : [ {
    "name" : "/",
    "tracing" : false
  }, {
    "name" : "test-vhost1",
    "tracing" : false
  }, {
    "name" : "test-vhost10",
    "tracing" : false
  }, {
    "name" : "test-vhost2",
    "tracing" : false
  }, {
    "name" : "test-vhost3",
    "tracing" : false
  }, {
    "name" : "test-vhost4",
    "tracing" : false
  }, {
    "name" : "test-vhost5",
    "tracing" : false
  }, {
    "name" : "test-vhost6",
    "tracing" : false
  }, {
```

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```
    "name" : "test-vhost7",
    "tracing" : false
  }, {
    "name" : "test-vhost8",
    "tracing" : false
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListVhostsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListVhostsRequest request = new ListVhostsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListVhostsResponse response = client.listVhosts(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListVhostsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_vhosts(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

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

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.4.3 Deleting Specified Virtual Hosts in Batches

Function

This API is used to delete specified virtual hosts in batches.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts

Table 5-47 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

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Request Parameters

Table 5-48 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	Array of strings	Names of resources to be deleted.

Response Parameters

None

Example Requests

Deleting specified virtual hosts in batches

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

{
  "name" : [ "vhost1", "vhost2" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting specified virtual hosts in batches

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

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

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

public class BatchDeleteVhostsSolution {

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

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```
        String projectId = "{project_id}";

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteVhostsRequest request = new BatchDeleteVhostsRequest();
        request.withInstanceId("{instance_id}");
        BatchDeleteBody body = new BatchDeleteBody();
        List<String> listbodyName = new ArrayList<>();
        listbodyName.add("vhost1");
        listbodyName.add("vhost2");
        body.withName(listbodyName);
        request.withBody(body);
        try {
            BatchDeleteVhostsResponse response = client.batchDeleteVhosts(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Deleting specified virtual hosts in batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = BatchDeleteVhostsRequest()
        request.instance_id = "{instance_id}"
        listNamebody = [
```

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```
            "vhost1",
            "vhost2"
        ]
        request.body = BatchDeleteBody(
            name=listNamebody
        )
        response = client.batch_delete_vhosts(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Deleting specified virtual hosts in batches

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteVhostsRequest{}
    request.InstanceId = "{instance_id}"
    var listNamebody = []string{
        "vhost1",
        "vhost2",
    }
    request.Body = &model.BatchDeleteBody{
        Name: listNamebody,
    }
    response, err := client.BatchDeleteVhosts(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.5 Exchange Management

5.5.1 Creating an Exchange

Function

This API is used to create an exchange.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges

Table 5-49 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

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Request Parameters

Table 5-50 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Exchange name.
type	Yes	String	Type (direct, fanout, topic, or headers)
durable	No	Boolean	Indicates whether to enable data persistence (RabbitMQ AMQP does not have this parameter because data persistence is enabled by default).
auto_delete	Yes	Boolean	Indicates whether to enable automatic deletion.
internal	No	Boolean	Internal exchange (RabbitMQ AMQP does not support this parameter).

Response Parameters

Status code: 200

Table 5-51 Response body parameters

Parameter	Type	Description
durable	Boolean	Indicates whether data persistence is enabled.
default	Boolean	Indicates whether the exchange is default.
internal	Boolean	Indicates whether the exchange is internal.
name	String	Exchange name.
auto_delete	Boolean	Indicates whether automatic deletion is enabled.
type	String	Exchange type.
vhost	String	Virtual host.

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Example Requests

Creating an exchange

```
POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges

{
  "name" : "exchange_name_demo",
  "type" : "direct",
  "durable" : true,
  "auto_delete" : false,
  "internal" : false
}
```

Example Responses

Status code: 200

Successful

```
{
  "name" : "exchange_name_demo",
  "type" : "direct",
  "durable" : true,
  "auto_delete" : false,
  "internal" : false,
  "vhost" : "default"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating an exchange

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

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


public class CreateExchangeSolution {

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

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

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```
        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateExchangeRequest request = new CreateExchangeRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        CreateExchangeBody body = new CreateExchangeBody();
        body.withInternal(false);
        body.withAutoDelete(false);
        body.withDurable(true);
        body.withType("direct");
        body.withName("exchange_name_demo");
        request.withBody(body);
        try {
            CreateExchangeResponse response = client.createExchange(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Creating an exchange

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateExchangeRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.body = CreateExchangeBody(
            internal=False,
            auto_delete=False,
            durable=True,
            type="direct",
```

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```
            name="exchange_name_demo"
        )
        response = client.create_exchange(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating an exchange

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateExchangeRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    internalCreateExchangeBody:= false
    durableCreateExchangeBody:= true
    request.Body = &model.CreateExchangeBody{
        Internal: &internalCreateExchangeBody,
        AutoDelete: false,
        Durable: &durableCreateExchangeBody,
        Type: "direct",
        Name: "exchange_name_demo",
    }
    response, err := client.CreateExchange(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.5.2 Querying Exchanges

Function

This API is used to query exchanges.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges

Table 5-52 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

Table 5-53 Query Parameters

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

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Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records on each page. Value range: 0–50. The default value is 10.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-54 Response body parameters

Parameter	Type	Description
size	Integer	Number of displayed records.
total	Integer	Total number of results in a query.
items	Array of **ExchangeDetails** objects	Details of an exchange.

Table 5-55 ExchangeDetails

Parameter	Type	Description
durable	Boolean	Indicates whether data persistence is enabled.
default	Boolean	Indicates whether the exchange is default.
internal	Boolean	Indicates whether the exchange is internal.
name	String	Exchange name.
auto_delete	Boolean	Indicates whether automatic deletion is enabled.
type	String	Exchange type.
vhost	String	Virtual host.

Example Requests

Querying exchanges

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```
GET /v2/rabbitmq/{project_id}/instances/{instance_id}/exchanges?offset=0&limit=10
```

Example Responses

Status code: 200

Successful

```
{
  "total" : 1,
  "size" : 1,
  "items" : [ {
    "durable" : true,
    "default" : false,
    "internal" : false,
    "name" : "default",
    "auto_delete" : false,
    "type" : "direct"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListExchangesSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListExchangesRequest request = new ListExchangesRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        try {
            ListExchangesResponse response = client.listExchanges(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListExchangesRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        response = client.list_exchanges(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListExchangesRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    response, err := client.ListExchanges(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.5.3 Deleting Specified Exchanges in Batches

Function

This API is used to delete specified exchanges in batches.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges

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Table 5-56 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

Request Parameters

Table 5-57 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	Array of strings	Names of resources to be deleted.

Response Parameters

None

Example Requests

Deleting specified exchanges in batches

```
POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges

{
  "name" : [ "exchange1", "exchange2" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting specified exchanges in batches

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.rabbitmq.v2.region.RabbitMQRegion;
```

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```
import com.huaweicloud.sdk.rabbitmq.v2.*;
import com.huaweicloud.sdk.rabbitmq.v2.model.*;

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

public class BatchDeleteExchangesSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteExchangesRequest request = new BatchDeleteExchangesRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        BatchDeleteBody body = new BatchDeleteBody();
        List<String> listbodyName = new ArrayList<>();
        listbodyName.add("exchange1");
        listbodyName.add("exchange2");
        body.withName(listbodyName);
        request.withBody(body);
        try {
            BatchDeleteExchangesResponse response = client.batchDeleteExchanges(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Deleting specified exchanges in batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = BatchDeleteExchangesRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        listNamebody = [
            "exchange1",
            "exchange2"
        ]
        request.body = BatchDeleteBody(
            name=listNamebody
        )
        response = client.batch_delete_exchanges(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Deleting specified exchanges in batches

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteExchangesRequest{}
```

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```
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    var listNamebody = []string{
        "exchange1",
        "exchange2",
    }
    request.Body = &model.BatchDeleteBody{
        Name: listNamebody,
    }
    response, err := client.BatchDeleteExchanges(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.6 Queue Management

5.6.1 Creating a Queue

Function

This API is used to create a queue.

Calling Method

For details, see **Calling APIs**.

URI

PUT /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues

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Table 5-58 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

Request Parameters

Table 5-59 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Queue name.
auto_delete	Yes	Boolean	Indicates whether to enable automatic deletion.
durable	No	Boolean	Indicates whether to enable data persistence (RabbitMQ AMQP does not have this field because data persistence is enabled by default).
dead_letter_exchange	No	String	Name of the dead letter exchange. Rejected and expired messages are re-sent to this exchange.
dead_letter_routing_key	No	String	Routing key of the dead letter exchange. The dead letter exchange sends dead letter messages to the queue with a matching routing key.
message_ttl	No	Long	Indicates for how long a message in this queue can be retained.

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Parameter	Mandatory	Type	Description
lazy_mode	No	String	To make this queue lazy, enter **lazy**. Lazy queues store as many messages as possible on disk to save memory. If this parameter is not set, messages are stored in memory to be delivered quickly. (RabbitMQ AMQP does not have this parameter because messages are stored on disk by default).

Response Parameters

Status code: 200

Table 5-60 Response body parameters

Parameter	Type	Description
name	String	Queue name.
auto_delete	Boolean	Indicates whether to enable automatic deletion.
durable	Boolean	Indicates whether to enable data persistence (RabbitMQ AMQP does not have this field because data persistence is enabled by default).
dead_letter_exchange	String	Name of the dead letter exchange. Rejected and expired messages are re-sent to this exchange.
dead_letter_routing_key	String	Routing key of the dead letter exchange. The dead letter exchange sends dead letter messages to the queue with a matching routing key.
message_ttl	Long	Indicates for how long a message in this queue can be retained.
lazy_mode	String	To make this queue lazy, enter **lazy**. Lazy queues store as many messages as possible on disk to save memory. If this parameter is not set, messages are stored in memory to be delivered quickly. (RabbitMQ AMQP does not have this parameter because messages are stored on disk by default).

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Example Requests

Creating a queue

```
PUT https://{endpoint}/v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues

{
  "name" : "string",
  "auto_delete" : true,
  "durable" : true,
  "dead_letter_exchange" : "string",
  "dead_letter_routing_key" : "string",
  "message_ttl" : 6000,
  "lazy_mode" : "string"
}
```

Example Responses

Status code: 200

Successful

```
{
  "name" : "string",
  "auto_delete" : true,
  "durable" : true,
  "dead_letter_exchange" : "string",
  "dead_letter_routing_key" : "string",
  "message_ttl" : 60000,
  "lazy_mode" : "string"
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating a queue

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

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


public class CreateQueueSolution {

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

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

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```
            .withAk(ak)
            .withSk(sk);

    RabbitMQClient client = RabbitMQClient.newBuilder()
            .withCredential(auth)
            .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
            .build();
    CreateQueueRequest request = new CreateQueueRequest();
    request.withInstanceId("{instance_id}");
    request.withVhost("{vhost}");
    CreateQueueBody body = new CreateQueueBody();
    body.withLazyMode("string");
    body.withMessageTtl(6000L);
    body.withDeadLetterRoutingKey("string");
    body.withDeadLetterExchange("string");
    body.withDurable(true);
    body.withAutoDelete(true);
    body.withName("string");
    request.withBody(body);
    try {
        CreateQueueResponse response = client.createQueue(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
  }
}
```

Python

Creating a queue

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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


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```
        request.body = CreateQueueBody(
            lazy_mode="string",
            message_ttl=6000,
            dead_letter_routing_key="string",
            dead_letter_exchange="string",
            durable=True,
            auto_delete=True,
            name="string"
        )
        response = client.create_queue(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating a queue

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateQueueRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    lazyModeCreateQueueBody:= "string"
    messageTtlCreateQueueBody:= int64(6000)
    deadLetterRoutingKeyCreateQueueBody:= "string"
    deadLetterExchangeCreateQueueBody:= "string"
    durableCreateQueueBody:= true
    request.Body = &model.CreateQueueBody{
        LazyMode: &lazyModeCreateQueueBody,
        MessageTtl: &messageTtlCreateQueueBody,
        DeadLetterRoutingKey: &deadLetterRoutingKeyCreateQueueBody,
        DeadLetterExchange: &deadLetterExchangeCreateQueueBody,
        Durable: &durableCreateQueueBody,
        AutoDelete: true,
        Name: "string",
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.6.2 Querying Queues of a Virtual Host

Function

This API is used to query queues of a virtual host.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues

Table 5-61 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

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Table 5-62 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	Integer	Number of records on each page. Value range: 0–50. The default value is 10.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-63 Response body parameters

Parameter	Type	Description
size	Integer	Number of displayed records.
total	Integer	Total number of results in a query.
items	Array of **QueueDetails** objects	Query details.

Table 5-64 QueueDetails

Parameter	Type	Description
vhost	String	Virtual host name.
name	String	Queue name.
durable	Boolean	Indicates whether data persistence is enabled.
auto_delete	Boolean	Indicates whether automatic deletion is enabled.
messages	Integer	Accumulated messages.
consumers	Integer	Connected consumers.

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Parameter	Type	Description
policy	String	Policy (RabbitMQ AMQP does not support this parameter.
arguments	QueueArguments object	Queue parameter. This parameter is not returned if it is not configured.

Table 5-65 QueueArguments

Parameter	Type	Description
x-message-ttl	Long	Message retention period. This parameter indicates for how long a message in this queue can be retained.
x-dead-letter-exchange	String	Name of the dead letter exchange. Rejected and expired messages are re-sent to this exchange.
x-dead-letter-routing-key	String	Routing key of the dead letter exchange. The dead letter exchange sends dead letter messages to the queue with a matching routing key.
x-queue-mode	String	Lazy queue (RabbitMQ AMQP does not have this parameter because all messages are persisted by default).

Example Requests

Querying queues

```
GET https://{endpoint}/v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues?offset=0&limit=10
```

Example Responses

Status code: 200

Successful

```
{
  "size" : 1,
  "total" : 1,
  "items" : [ {
    "durable" : true,
    "name" : "queue10",
    "auto_delete" : false,
    "messages" : 0,
    "consumers" : 0,
    "arguments" : {
      "x-dead-letter-exchange" : "dead-exchange-deal",
      "x-dead-letter-routing-key" : "dead-ex-routing-key",
      "x-message-ttl" : 60000
    }
```

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```
 } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListQueuesSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListQueuesRequest request = new ListQueuesRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        try {
            ListQueuesResponse response = client.listQueues(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
```

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```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListQueuesRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        response = client.list_queues(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListQueuesRequest{}
```

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```
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    response, err := client.ListQueues(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.6.3 Deleting Specified Queues in Batches

Function

This API is used to delete specified queues in batches.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues

Table 5-66 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.

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Request Parameters

Table 5-67 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	Array of strings	Names of resources to be deleted.

Response Parameters

None

Example Requests

Deleting queues in batches

```
POST https://{endpoint}/v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues

{
  "name" : [ "queue1", "queue2" ]
}
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

Deleting queues in batches

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

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

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

public class BatchDeleteQueuesSolution {

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

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```
        String projectId = "{project_id}";

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchDeleteQueuesRequest request = new BatchDeleteQueuesRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        BatchDeleteBody body = new BatchDeleteBody();
        List<String> listbodyName = new ArrayList<>();
        listbodyName.add("queue1");
        listbodyName.add("queue2");
        body.withName(listbodyName);
        request.withBody(body);
        try {
            BatchDeleteQueuesResponse response = client.batchDeleteQueues(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Deleting queues in batches

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

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```
        request.vhost = "{vhost}"
        listNamebody = [
            "queue1",
            "queue2"
        ]
        request.body = BatchDeleteBody(
            name=listNamebody
        )
        response = client.batch_delete_queues(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Deleting queues in batches

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchDeleteQueuesRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    var listNamebody = []string{
        "queue1",
        "queue2",
    }
    request.Body = &model.BatchDeleteBody{
        Name: listNamebody,
    }
    response, err := client.BatchDeleteQueues(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

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More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.6.4 Clearing Messages in a Queue

Function

This API is used to clear messages in a queue.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues/{queue}/contents

Table 5-68 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.
queue	Yes	String	Queue name.

Request Parameters

None

Response Parameters

None

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Example Requests

Clearing messages in a queue

```
DELETE /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues/{queue}/contents
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteQueueInfoSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteQueueInfoRequest request = new DeleteQueueInfoRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        request.withQueue("{queue}");
        try {
            DeleteQueueInfoResponse response = client.deleteQueueInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
```


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```
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = DeleteQueueInfoRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.queue = "{queue}"
        response = client.delete_queue_info(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

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```
        WithProjectId(projectId).
        Build()

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteQueueInfoRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    request.Queue = "{queue}"
    response, err := client.DeleteQueueInfo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.6.5 Querying Specified Queue Details

Function

This API is used to query details of a specified queue.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues/{queue}

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Table 5-69 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.
queue	Yes	String	Queue name.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-70 Response body parameters

Parameter	Type	Description
vhost	String	Virtual host name.
name	String	Queue name.
durable	Boolean	Indicates whether data persistence is enabled.
auto_delete	Boolean	Indicates whether automatic deletion is enabled.
messages	Integer	Accumulated messages.
consumers	Integer	Connected consumers.
policy	String	Policy (RabbitMQ AMQP does not support this parameter.
arguments	**QueueArguments** object	Queue parameter. This parameter is not returned if it is not configured.
consumer_details	Array of **ConsumerDetails** objects	Details of subscribed consumers.
queue_bindings	Array of **BindingsDetails** objects	Bindings to this queue.

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Table 5-71 QueueArguments

Parameter	Type	Description
x-message-ttl	Long	Message retention period. This parameter indicates for how long a message in this queue can be retained.
x-dead-letter-exchange	String	Name of the dead letter exchange. Rejected and expired messages are re-sent to this exchange.
x-dead-letter-routing-key	String	Routing key of the dead letter exchange. The dead letter exchange sends dead letter messages to the queue with a matching routing key.
x-queue-mode	String	Lazy queue (RabbitMQ AMQP does not have this parameter because all messages are persisted by default).

Table 5-72 ConsumerDetails

Parameter	Type	Description
consumer_tag	String	Consumer tag.
channel_details	**ChannelDetails** object	Consumer connections.
ack_required	Boolean	Indicates whether manual acknowledgement is enabled on the consumer client.
prefetch_count	Integer	Consumer client preset value.

Table 5-73 ChannelDetails

Parameter	Type	Description
name	String	Channel details, including the client *IP:Port* and the server *IP:Port* (channel_id).
number	Integer	Channel quantity.
user	String	Consumer username. If ACL is enabled, the real username will be returned; otherwise **null** will be returned.
connection_name	String	Connection details, including the client *IP:Port* and the server *IP:Port*.

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Parameter	Type	Description
peer_host	String	IP address of the connected consumer.
peer_port	Integer	Port of the process of the connected consumer.

Table 5-74 BindingsDetails

Parameter	Type	Description
source	String	Exchange name.
destination_type	String	Binding target type.
destination	String	Binding target name.
routing_key	String	Binding key-value.
properties_key	String	URL-translated routing key.

Example Requests

Querying specified queue details

```
GET https://{endpoint}/v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/queues?
offset=0&limit=10
```

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowQueueDetailsSolution {

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

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```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowQueueDetailsRequest request = new ShowQueueDetailsRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        request.withQueue("{queue}");
        try {
            ShowQueueDetailsResponse response = client.showQueueDetails(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowQueueDetailsRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.queue = "{queue}"
        response = client.show_queue_details(request)
        print(response)
```

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

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowQueueDetailsRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    request.Queue = "{queue}"
    response, err := client.ShowQueueDetails(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

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Error Codes

See **Error Codes**.

5.7 Binding Management

5.7.1 Adding a Binding

Function

This API is used to add a binding.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges/{exchange}/binding

Table 5-75 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.
exchange	Yes	String	Exchange name.

Request Parameters

Table 5-76 Request body parameters

Parameter	Mandatory	Type	Description
destination	Yes	String	Name of a target exchange or queue.
routing_key	Yes	String	Binding key-value. This parameter informs the exchange of which queues or exchanges to deliver messages to.

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Parameter	Mandatory	Type	Description
destination_type	Yes	String	Type of the binding target. The options are Exchange and Queue (RabbitMQ AMQP supports only Queue bindings).

Response Parameters

Status code: 200

Table 5-77 Response body parameters

Parameter	Type	Description
source	String	Binding source.
destination_type	String	Type of the binding target. The options are Exchange or Queue.
destination	String	Name of a target exchange or queue.
routing_key	String	Binding key-value. This parameter informs the exchange of which queues to deliver messages to.

Example Requests

Binding **test-exchange** to a Queue target named **mirror-queue** with routing key **routing_key_1**

```
POST /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/default/exchanges/test-exchange/binding

{
  "destination_type" : "Queue",
  "destination" : "mirror-queue",
  "routing_key" : "routing_key_1"
}
```

Example Responses

Status code: 200

Successful

```
{
  "source" : "exchange_name",
  "destination_type" : "Queue",
  "destination" : "queue_name",
  "routing_key" : "binding_key_demo"
}
```

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SDK Sample Code

The SDK sample code is as follows.

Java

Binding **test-exchange** to a Queue target named **mirror-queue** with routing key **routing_key_1**

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

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


public class CreateBindingSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateBindingRequest request = new CreateBindingRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        request.withExchange("{exchange}");
        CreateBindingBody body = new CreateBindingBody();
        body.withDestinationType("Queue");
        body.withRoutingKey("routing_key_1");
        body.withDestination("mirror-queue");
        request.withBody(body);
        try {
            CreateBindingResponse response = client.createBinding(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```


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Python

Binding **test-exchange** to a Queue target named **mirror-queue** with routing key **routing_key_1**

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateBindingRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.exchange = "{exchange}"
        request.body = CreateBindingBody(
            destination_type="Queue",
            routing_key="routing_key_1",
            destination="mirror-queue"
        )
        response = client.create_binding(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Binding **test-exchange** to a Queue target named **mirror-queue** with routing key **routing_key_1**

```
package main

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

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateBindingRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    request.Exchange = "{exchange}"
    request.Body = &model.CreateBindingBody{
        DestinationType: "Queue",
        RoutingKey: "routing_key_1",
        Destination: "mirror-queue",
    }
    response, err := client.CreateBinding(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.7.2 Querying Bindings of an Exchange

Function

This API is used to query bindings of an exchange.

Calling Method

For details, see **Calling APIs**.

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URI

GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges/{exchange}/binding

Table 5-78 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.
exchange	Yes	String	Exchange name.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-79 Response body parameters

Parameter	Type	Description
size	Integer	Number of displayed records.
total	Integer	Total number of results in a query.
items	Array of **BindingsDetails** objects	Binding details.

Table 5-80 BindingsDetails

Parameter	Type	Description
source	String	Exchange name.
destination_type	String	Binding target type.
destination	String	Binding target name.
routing_key	String	Binding key-value.
properties_key	String	URL-translated routing key.

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Example Requests

Querying bindings of an exchange

```
GET /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges/{exchange}/binding
```

Example Responses

Status code: 200

Successful

```
{
  "size" : 1,
  "total" : 1,
  "items" : [ {
    "source" : "excahnge-test",
    "destination_type" : "queue",
    "destination" : "queue-test",
    "routing_key" : "test-routing-key",
    "properties_key" : "test-routing-key"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListBindingsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListBindingsRequest request = new ListBindingsRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
```

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```
        request.withExchange("{exchange}");
        try {
            ListBindingsResponse response = client.listBindings(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListBindingsRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.exchange = "{exchange}"
        response = client.list_bindings(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListBindingsRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    request.Exchange = "{exchange}"
    response, err := client.ListBindings(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.7.3 Deleting Bindings

Function

This API is used to delete bindings.

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Calling Method

For details, see **Calling APIs**.

URI

DELETE /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges/{exchange}/destination-type/{destination_type}/destination/{destination}/properties-key/{properties_key}/unbinding

Table 5-81 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
vhost	Yes	String	Virtual host name.
exchange	Yes	String	Exchange name.
destination_type	Yes	String	Type of the binding target. The options are Exchange and Queue. RabbitMQ AMQP instances only support Queue bindings.
destination	Yes	String	Target binding name.
properties_key	Yes	String	URL-translated routing key of the binding. Obtain the routing key from the response of calling the **Querying Bindings of an Exchange** or **Querying Specified Queue Details** APIs.

Request Parameters

None

Response Parameters

None

Example Requests

Removing a binding

```
DELETE /v2/rabbitmq/{project_id}/instances/{instance_id}/vhosts/{vhost}/exchanges/{exchange}/destination-type/{destination_type}/destination/{destination}/properties-key/{properties_key}/unbinding
```


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Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteBindingSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteBindingRequest request = new DeleteBindingRequest();
        request.withInstanceId("{instance_id}");
        request.withVhost("{vhost}");
        request.withExchange("{exchange}");
        request.withDestinationType("{destination_type}");
        request.withDestination("{destination}");
        request.withPropertiesKey("{properties_key}");
        try {
            DeleteBindingResponse response = client.deleteBinding(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

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Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = DeleteBindingRequest()
        request.instance_id = "{instance_id}"
        request.vhost = "{vhost}"
        request.exchange = "{exchange}"
        request.destination_type = "{destination_type}"
        request.destination = "{destination}"
        request.properties_key = "{properties_key}"
        response = client.delete_binding(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

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```
        Build()

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteBindingRequest{}
    request.InstanceId = "{instance_id}"
    request.Vhost = "{vhost}"
    request.Exchange = "{exchange}"
    request.DestinationType = "{destination_type}"
    request.Destination = "{destination}"
    request.PropertiesKey = "{properties_key}"
    response, err := client.DeleteBinding(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.8 User Management

5.8.1 Creating a User

Function

This API is used to create a user for a RabbitMQ AMQP instance.

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{project_id}/instances/{instance_id}/users

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Table 5-82 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-83 Request body parameters

Parameter	Mandatory	Type	Description
access_key	No	String	Username, which starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).
secret_key	No	String	Secret key. 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters `~!@#$%^&*()-_=+|[{}];:'",<.>/? It cannot be the username or the username spelled backwards.
vhosts	No	Array of **AMQPUserPerm** objects	Virtual hosts to be granted permissions for. Each user can have permissions for multiple virtual hosts.

Table 5-84 AMQPUserPerm

Parameter	Mandatory	Type	Description
vhost	No	String	Name of the virtual host to be granted permissions for. Each user can have permissions for multiple virtual hosts.

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Parameter	Mandatory	Type	Description
conf	No	String	Granting resource permissions using regular expressions. For example, if you enter **^janeway-.*** in the text box, it indicates that the user is authorized to configure all the resources whose names start with **janeway-** in this virtual host.
write	No	String	Granting resource write permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to write to all resources in this virtual host.
read	No	String	Granting resource read permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to read all resources in this virtual host.

Response Parameters

Status code: 200

Table 5-85 Response body parameters

Parameter	Type	Description
access_key	String	Username, which starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).

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Parameter	Type	Description
secret_key	String	Secret key. 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters `~!@#$%^&*()-_=+|[{}];:'",<.>/? It cannot be the username or the username spelled backwards.
vhosts	Array of **AMQPUserPerm** objects	Virtual hosts to be granted permissions for. Each user can have permissions for multiple virtual hosts.

Table 5-86 AMQPUserPerm

Parameter	Type	Description
vhost	String	Name of the virtual host to be granted permissions for. Each user can have permissions for multiple virtual hosts.
conf	String	Granting resource permissions using regular expressions. For example, if you enter **^janeway-.*** in the text box, it indicates that the user is authorized to configure all the resources whose names start with **janeway-** in this virtual host.
write	String	Granting resource write permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to write to all resources in this virtual host.
read	String	Granting resource read permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to read all resources in this virtual host.

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Example Requests

Creating an AMQP user with permissions for accessing the virtual host **default** and configuring all resources under the virtual host

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

{
  "access_key" : "admin123",
  "secret_key" : "**************",
  "vhosts" : [ {
    "vhost" : "default",
    "conf" : ".*",
    "write" : ".*",
    "read" : ".*"
  } ]
}
```

Example Responses

Status code: 200

Successful

```
{
  "access_key" : "admin123",
  "secret_key" : "**************",
  "vhosts" : [ {
    "vhost" : "default",
    "conf" : ".*",
    "write" : ".*",
    "read" : ".*"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Creating an AMQP user with permissions for accessing the virtual host **default** and configuring all resources under the virtual host

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

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

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

public class CreateUserSolution {

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

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```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        CreateUserRequest request = new CreateUserRequest();
        request.withInstanceId("{instance_id}");
        AMQPUser body = new AMQPUser();
        List<AMQPUserPerm> listbodyVhosts = new ArrayList<>();
        listbodyVhosts.add(
            new AMQPUserPerm()
                .withVhost("default")
                .withConf(".*")
                .withWrite(".*")
                .withRead(".*")
        );
        body.withVhosts(listbodyVhosts);
        body.withSecretKey("**************");
        body.withAccessKey("admin123");
        request.withBody(body);
        try {
            CreateUserResponse response = client.createUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Creating an AMQP user with permissions for accessing the virtual host **default** and configuring all resources under the virtual host

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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

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

    try:
        request = CreateUserRequest()
        request.instance_id = "{instance_id}"
        listVhostsbody = [
            AMQPUserPerm(
                vhost="default",
                conf=".*",
                write=".*",
                read=".*"
            )
        ]
        request.body = AMQPUser(
            vhosts=listVhostsbody,
            secret_key="**************",
            access_key="admin123"
        )
        response = client.create_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating an AMQP user with permissions for accessing the virtual host **default** and configuring all resources under the virtual host

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateUserRequest{}
```

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```
    request.InstanceId = "{instance_id}"
    vhostVhosts:= "default"
    confVhosts:= ".*"
    writeVhosts:= ".*"
    readVhosts:= ".*"
    var listVhostsbody = []model.AmqpUserPerm{
        {
            Vhost: &vhostVhosts,
            Conf: &confVhosts,
            Write: &writeVhosts,
            Read: &readVhosts,
        },
    }
    secretKeyAmqpUser:= "**************"
    accessKeyAmqpUser:= "admin123"
    request.Body = &model.AmqpUser{
        Vhosts: &listVhostsbody,
        SecretKey: &secretKeyAmqpUser,
        AccessKey: &accessKeyAmqpUser,
    }
    response, err := client.CreateUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.8.2 Querying Users

Function

This API is used to query users of a RabbitMQ AMQP instance.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}/users

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Table 5-87 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Table 5-88 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	String	Offset, which is the position where the query starts. The value must be greater than or equal to 0.
limit	No	String	Number of records on each page. Value range: 0–50. The default value is 10.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-89 Response body parameters

Parameter	Type	Description
users	Array of **AMQPUser** objects	User list.
total	Integer	Total number of users.

Table 5-90 AMQPUser

Parameter	Type	Description
access_key	String	Username, which starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).

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Parameter	Type	Description
secret_key	String	Secret key. 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters `~!@#$%^&*()-_=+|[{}];:'",<.>/? It cannot be the username or the username spelled backwards.
vhosts	Array of **AMQPUserPerm** objects	Virtual hosts to be granted permissions for. Each user can have permissions for multiple virtual hosts.

Table 5-91 AMQPUserPerm

Parameter	Type	Description
vhost	String	Name of the virtual host to be granted permissions for. Each user can have permissions for multiple virtual hosts.
conf	String	Granting resource permissions using regular expressions. For example, if you enter **^janeway-.*** in the text box, it indicates that the user is authorized to configure all the resources whose names start with **janeway-** in this virtual host.
write	String	Granting resource write permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to write to all resources in this virtual host.
read	String	Granting resource read permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to read all resources in this virtual host.

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Example Requests

Querying users

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

Example Responses

Status code: 200

Successful

```
{
  "users" : [ {
    "access_key" : "admin123",
    "secret_key" : "**************",
    "vhosts" : [ {
      "vhost" : "default",
      "conf" : ".*",
      "write" : ".*",
      "read" : ".*"
    } ]
  } ],
  "total" : 1
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListUserSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListUserRequest request = new ListUserRequest();
```

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```
        request.withInstanceId("{instance_id}");
        try {
            ListUserResponse response = client.listUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListUserRequest()
        request.instance_id = "{instance_id}"
        response = client.list_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

func main() {
```

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.8.3 Modifying User Parameters

Function

This API is used to modify parameters of a user (only for RabbitMQ AMQP).

Calling Method

For details, see **Calling APIs**.

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URI

PUT /v2/{project_id}/instances/{instance_id}/users/{user_name}

Table 5-92 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
user_name	Yes	String	Username.

Request Parameters

Table 5-93 Request body parameters

Parameter	Mandatory	Type	Description
access_key	No	String	Username, which starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).
secret_key	No	String	Secret key. 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters `~!@#$ %^&*()-_=+|[{}];:'",<.>/? It cannot be the username or the username spelled backwards.
vhosts	No	Array of **AMQPUserPerm** objects	Virtual hosts to be granted permissions for. Each user can have permissions for multiple virtual hosts.

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Table 5-94 AMQPUserPerm

Parameter	Mandatory	Type	Description
vhost	No	String	Name of the virtual host to be granted permissions for. Each user can have permissions for multiple virtual hosts.
conf	No	String	Granting resource permissions using regular expressions. For example, if you enter **^janeway-.*** in the text box, it indicates that the user is authorized to configure all the resources whose names start with **janeway-** in this virtual host.
write	No	String	Granting resource write permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to write to all resources in this virtual host.
read	No	String	Granting resource read permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to read all resources in this virtual host.

Response Parameters

Status code: 200

Table 5-95 Response body parameters

Parameter	Type	Description
access_key	String	Username, which starts with a letter, consists of 7 to 64 characters, and contains only letters, digits, hyphens (-), and underscores (_).

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Parameter	Type	Description
secret_key	String	Secret key. 8 to 32 characters. Contain at least three of the following character types: • Uppercase letters • Lowercase letters • Digits • Special characters `~!@#$%^&*()-_=+|[{}];:'",<.>/? It cannot be the username or the username spelled backwards.
vhosts	Array of **AMQPUserPerm** objects	Virtual hosts to be granted permissions for. Each user can have permissions for multiple virtual hosts.

Table 5-96 AMQPUserPerm

Parameter	Type	Description
vhost	String	Name of the virtual host to be granted permissions for. Each user can have permissions for multiple virtual hosts.
conf	String	Granting resource permissions using regular expressions. For example, if you enter **^janeway-.*** in the text box, it indicates that the user is authorized to configure all the resources whose names start with **janeway-** in this virtual host.
write	String	Granting resource write permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to write to all resources in this virtual host.
read	String	Granting resource read permissions using regular expressions. For example, if you enter **.*** in the text box, it indicates that the user is authorized to read all resources in this virtual host.

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Example Requests

Modifying parameters of the user to enable access to the virtual host **default**, grant read or write permissions to all resources under the virtual host, and allow configurations only on resources starting with **janeway-**

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

{
  "access_key" : "admin123",
  "secret_key" : "**************",
  "vhosts" : [ {
    "vhost" : "default",
    "conf" : "^janeway-.*",
    "write" : ".*",
    "read" : ".*"
  } ]
}
```

Example Responses

Status code: 200

Successful

```
{
  "access_key" : "admin123",
  "secret_key" : "**************",
  "vhosts" : [ {
    "vhost" : "default",
    "conf" : "^janeway-.*",
    "write" : ".*",
    "read" : ".*"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

Modifying parameters of the user to enable access to the virtual host **default**, grant read or write permissions to all resources under the virtual host, and allow configurations only on resources starting with **janeway-**

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

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

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

public class UpdateUserSolution {

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

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        UpdateUserRequest request = new UpdateUserRequest();
        request.withInstanceId("{instance_id}");
        request.withUserName("{user_name}");
        AMQPUser body = new AMQPUser();
        List<AMQPUserPerm> listbodyVhosts = new ArrayList<>();
        listbodyVhosts.add(
            new AMQPUserPerm()
                .withVhost("default")
                .withConf("^janeway-.*")
                .withWrite(".*")
                .withRead(".*")
        );
        body.withVhosts(listbodyVhosts);
        body.withSecretKey("**********");
        body.withAccessKey("admin123");
        request.withBody(body);
        try {
            UpdateUserResponse response = client.updateUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

Modifying parameters of the user to enable access to the virtual host **default**, grant read or write permissions to all resources under the virtual host, and allow configurations only on resources starting with **janeway-**

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

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```
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateUserRequest()
        request.instance_id = "{instance_id}"
        request.user_name = "{user_name}"
        listVhostsbody = [
            AMQPUserPerm(
                vhost="default",
                conf="^janeway-.*",
                write=".*",
                read=".*"
            )
        ]
        request.body = AMQPUser(
            vhosts=listVhostsbody,
            secret_key="**********",
            access_key="admin123"
        )
        response = client.update_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Modifying parameters of the user to enable access to the virtual host **default**, grant read or write permissions to all resources under the virtual host, and allow configurations only on resources starting with **janeway-**

```
package main

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

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

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

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```
        Build()

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateUserRequest{}
    request.InstanceId = "{instance_id}"
    request.UserName = "{user_name}"
    vhostVhosts:= "default"
    confVhosts:= "^janeway-.*"
    writeVhosts:= ".*"
    readVhosts:= ".*"
    var listVhostsbody = []model.AmqpUserPerm{
        {
            Vhost: &vhostVhosts,
            Conf: &confVhosts,
            Write: &writeVhosts,
            Read: &readVhosts,
        },
    }
    secretKeyAmqpUser:= "**************"
    accessKeyAmqpUser:= "admin123"
    request.Body = &model.AmqpUser{
        Vhosts: &listVhostsbody,
        SecretKey: &secretKeyAmqpUser,
        AccessKey: &accessKeyAmqpUser,
    }
    response, err := client.UpdateUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

5.8.4 Deleting Users

Function

This API is used to delete users for a RabbitMQ AMQP instance.

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Calling Method

For details, see **Calling APIs**.

URI

DELETE /v2/{project_id}/instances/{instance_id}/users/{user_name}

Table 5-97 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
user_name	Yes	String	Username.

Request Parameters

None

Response Parameters

None

Example Requests

Deleting specified users

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteUserSolution {
```


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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteUserRequest request = new DeleteUserRequest();
        request.withInstanceId("{instance_id}");
        request.withUserName("{user_name}");
        try {
            DeleteUserResponse response = client.deleteUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = DeleteUserRequest()
```

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```
        request.instance_id = "{instance_id}"
        request.user_name = "{user_name}"
        response = client.delete_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteUserRequest{}
    request.InstanceId = "{instance_id}"
    request.UserName = "{user_name}"
    response, err := client.DeleteUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
204	Successful

Error Codes

See **Error Codes**.

5.9 Background Task Management

5.9.1 Listing Background Tasks

Function

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

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}/tasks

Table 5-98 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Table 5-99 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.

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Parameter	Mandatory	Type	Description
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 5-100 Response body parameters

Parameter	Type	Description
task_count	String	Number of tasks.
tasks	Array of **tasks** objects	Task list.

Table 5-101 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}'
```

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Example Responses

Status code: 200

The tasks are listed successfully.

```
{
  "task_count" : "1",
  "tasks" : [ {
    "id" : "ff80808272dcc90f0172df1e490f41b0",
    "name" : "bindInstancePublicIp",
    "user_name" : "dms_test",
    "user_id" : "xxxxxxxx93ff484a828144c6xxxxxxxx",
    "params" : "{\"public_ip_id\":\"06a13350-4305-4338-9f0e-6b322bb1413d\",\"public_ip_address
\":\"xx.xx.xx.xx\",\"enable_public_ip\":true}",
    "status" : "SUCCESS",
    "created_at" : "2020-06-23T03:00:03.471Z",
    "updated_at" : "2020-06-23T03:00:08.130Z"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListBackgroundTasksSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListBackgroundTasksRequest request = new ListBackgroundTasksRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListBackgroundTasksResponse response = client.listBackgroundTasks(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListBackgroundTasksRequest()
        request.instance_id = "{instance_id}"
        response = client.list_background_tasks(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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```
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The tasks are listed successfully.

Error Codes

See **Error Codes**.

5.9.2 Querying a Background Task

Function

This API is used to query a specified background task.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}/tasks/{task_id}

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Table 5-102 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
task_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-103 Response body parameters

Parameter	Type	Description
task_count	String	Number of tasks.
tasks	Array of **tasks** objects	Task list.

Table 5-104 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/{task_id}
```

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Example Responses

Status code: 200

The query is successful.

```
{
  "task_count" : "1",
  "tasks" : [ {
    "id" : "ff80808272dcc90f0172df1e490f41b0",
    "name" : "bindInstancePublicIp",
    "user_name" : "dms_test",
    "user_id" : "xxxxxxxx93ff484a828144c6xxxxxxxx",
    "params" : "{\"public_ip_id\":\"06a13350-4305-4338-9f0e-6b322bb1413d\",\"public_ip_address
\":\"xx.xx.xx.xx\",\"enable_public_ip\":true}",
    "status" : "SUCCESS",
    "created_at" : "2020-06-23T03:00:03.471Z",
    "updated_at" : "2020-06-23T03:00:08.130Z"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowBackgroundTaskSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowBackgroundTaskRequest request = new ShowBackgroundTaskRequest();
        request.withInstanceId("{instance_id}");
        request.withTaskId("{task_id}");
        try {
            ShowBackgroundTaskResponse response = client.showBackgroundTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowBackgroundTaskRequest()
        request.instance_id = "{instance_id}"
        request.task_id = "{task_id}"
        response = client.show_background_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowBackgroundTaskRequest{}
    request.InstanceId = "{instance_id}"
    request.TaskId = "{task_id}"
    response, err := client.ShowBackgroundTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The query is successful.

Error Codes

See **Error Codes**.

5.9.3 Deleting a Background Task

Function

This API is used to delete a specified background task.

Calling Method

For details, see **Calling APIs**.

URI

DELETE /v2/{project_id}/instances/{instance_id}/tasks/{task_id}

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Table 5-105 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.
task_id	Yes	String	Task ID.

Request Parameters

None

Response Parameters

None

Example Requests

Deleting a specified background task

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class DeleteBackgroundTaskSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        DeleteBackgroundTaskRequest request = new DeleteBackgroundTaskRequest();
        request.withInstanceId("{instance_id}");
        request.withTaskId("{task_id}");
        try {
            DeleteBackgroundTaskResponse response = client.deleteBackgroundTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = DeleteBackgroundTaskRequest()
        request.instance_id = "{instance_id}"
        request.task_id = "{task_id}"
        response = client.delete_background_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

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Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteBackgroundTaskRequest{}
    request.InstanceId = "{instance_id}"
    request.TaskId = "{task_id}"
    response, err := client.DeleteBackgroundTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
204	The background task is deleted successfully.

Error Codes

See **Error Codes**.

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5.10 Tag Management

5.10.1 Batch Adding or Deleting Tags

Function

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

Calling Method

For details, see **Calling APIs**.

URI

POST /v2/{project_id}/rabbitmq/{instance_id}/tags/action

Table 5-106 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-107 Request body parameters

Parameter	Mandatory	Type	Description
action	No	String	Operation. Only lowercase letters are supported. • **create**: Tags are created. • **delete**: Tags are deleted.
tags	No	Array of **TagEntity** objects	Tag list.

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Table 5-108 TagEntity

Parameter	Mandatory	Type	Description
key	No	String	Tag key. • Must be specified. • Must be unique for the same instance. • Can contain 1 to 128 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@ • Cannot start with _sys_ • Cannot start or end with a space.
value	No	String	Tag value. • Can contain 0 to 255 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@

Response Parameters

None

Example Requests

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
POST https://{endpoint}/v2/{project_id}/rabbitmq/{instance_id}/tags/action

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

Example Responses

None

SDK Sample Code

The SDK sample code is as follows.

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Java

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

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

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

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

public class BatchCreateOrDeleteRabbitMqTagSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        BatchCreateOrDeleteRabbitMqTagRequest request = new BatchCreateOrDeleteRabbitMqTagRequest();
        request.withInstanceId("{instance_id}");
        BatchCreateOrDeleteTagReq body = new BatchCreateOrDeleteTagReq();
        List<TagEntity> listbodyTags = new ArrayList<>();
        listbodyTags.add(
            new TagEntity()
                .withKey("key1")
                .withValue("value1")
        );
        listbodyTags.add(
            new TagEntity()
                .withKey("key2")
                .withValue("value2")
        );
        body.withTags(listbodyTags);
        body.withAction(BatchCreateOrDeleteTagReq.ActionEnum.fromValue("create"));
        request.withBody(body);
        try {
            BatchCreateOrDeleteRabbitMqTagResponse response = client.batchCreateOrDeleteRabbitMqTag(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
```

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

Python

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = BatchCreateOrDeleteRabbitMqTagRequest()
        request.instance_id = "{instance_id}"
        listTagsbody = [
            TagEntity(
                key="key1",
                value="value1"
            ),
            TagEntity(
                key="key2",
                value="value2"
            )
        ]
        request.body = BatchCreateOrDeleteTagReq(
            tags=listTagsbody,
            action="create"
        )
        response = client.batch_create_or_delete_rabbit_mq_tag(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

Creating instance tags with tag keys key1 and key2 and tag values value1 and value2

```
package main
```

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchCreateOrDeleteRabbitMqTagRequest{}
    request.InstanceId = "{instance_id}"
    keyTags:= "key1"
    valueTags:= "value1"
    keyTags1:= "key2"
    valueTags1:= "value2"
    var listTagsbody = []model.TagEntity{
        {
            Key: &keyTags,
            Value: &valueTags,
        },
        {
            Key: &keyTags1,
            Value: &valueTags1,
        },
    }
    actionBatchCreateOrDeleteTagReq:= model.GetBatchCreateOrDeleteTagReqActionEnum().CREATE
    request.Body = &model.BatchCreateOrDeleteTagReq{
        Tags: &listTagsbody,
        Action: &actionBatchCreateOrDeleteTagReq,
    }
    response, err := client.BatchCreateOrDeleteRabbitMqTag(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

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Status Codes

Status Code	Description
204	Tags are successfully added or deleted.

Error Codes

See **Error Codes**.

5.10.2 Listing Tags of an Instance

Function

This API is used to query instance tags.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/rabbitmq/{instance_id}/tags

Table 5-109 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain it, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-110 Response body parameters

Parameter	Type	Description
tags	Array of **TagEntity** objects	Tag list.

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Table 5-111 TagEntity

Parameter	Type	Description
key	String	Tag key. • Must be specified. • Must be unique for the same instance. • Can contain 1 to 128 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@ • Cannot start with _sys_ • Cannot start or end with a space.
value	String	Tag value. • Can contain 0 to 255 characters. • Can contain letters, digits, spaces, and special characters _.:=+-@

Example Requests

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

Example Responses

Status code: 200

The instance tags are listed successfully.

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

SDK Sample Code

The SDK sample code is as follows.

Java

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

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

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```
public class ShowRabbitMqTagsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowRabbitMqTagsRequest request = new ShowRabbitMqTagsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowRabbitMqTagsResponse response = client.showRabbitMqTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
```

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```
        request = ShowRabbitMqTagsRequest()
        request.instance_id = "{instance_id}"
        response = client.show_rabbit_mq_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The instance tags are listed successfully.

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Error Codes

See **Error Codes**.

5.10.3 Listing Tags of a Project

Function

This API is used to query project tags.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/rabbitmq/tags

Table 5-112 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 5-113 Response body parameters

Parameter	Type	Description
tags	Array of **TagMultyValueEntity** objects	Tag list.

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Table 5-114 TagMultyValueEntity

Parameter	Type	Description
key	String	Tag key.
values	Array of strings	Tag value

Example Requests

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

Example Responses

Status code: 200

The project tags are listed successfully.

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

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowRabbitMqProjectTagsSolution {

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

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

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```
        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowRabbitMqProjectTagsRequest request = new ShowRabbitMqProjectTagsRequest();
        try {
            ShowRabbitMqProjectTagsResponse response = client.showRabbitMqProjectTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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```
)

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The project tags are listed successfully.

Error Codes

See **Error Codes**.

5.11 Other APIs

5.11.1 Listing Maintenance Time Windows

Function

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

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Calling Method

For details, see **Calling APIs**.

URI

GET /v2/instances/maintain-windows

Request Parameters

None

Response Parameters

Status code: 200

Table 5-115 Response body parameters

Parameter	Type	Description
maintain_windows	Array of **MaintainWindowsEntity** objects	List of supported maintenance time windows.

Table 5-116 MaintainWindowsEntity

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

Maintenance time window queried successfully.

```
{
  "maintain_windows" : [ {
    "default" : false,
    "seq" : 1,
```


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```
    "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"
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowMaintainWindowsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowMaintainWindowsRequest request = new ShowMaintainWindowsRequest();
```

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```
        try {
            ShowMaintainWindowsResponse response = client.showMaintainWindows(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk)

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

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

Go

```
package main

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

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

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```
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Maintenance time window queried successfully.

Error Codes

See **Error Codes**.

5.11.2 Listing AZ Information

Function

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

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/available-zones

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Request Parameters

None

Response Parameters

Status code: 200

Table 5-117 Response body parameters

Parameter	Type	Description
region_id	String	Region ID.
available_zones	Array of **available_zones** objects	Array of AZs.

Table 5-118 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.

```
{
  "region_id" : "xxx",
  "available_zones" : [ {
    "soldOut" : false,
```


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```
    "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
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListAvailableZonesSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListAvailableZonesRequest request = new ListAvailableZonesRequest();
        try {
            ListAvailableZonesResponse response = client.listAvailableZones(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk)

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

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

Go

```
package main

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

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

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

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```
    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The AZ information is queried successfully.

Error Codes

See **Error Codes**.

5.11.3 Querying Product Specifications

Function

This API is used to query the product specifications.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{engine}/products

Table 5-119 Path Parameters

Parameter	Mandatory	Type	Description
engine	Yes	String	Message engine.

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Table 5-120 Query Parameters

Parameter	Mandatory	Type	Description
product_id	No	String	Product ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-121 Response body parameters

Parameter	Type	Description
engine	String	Message engine of DMS.
versions	Array of strings	Supported versions.
products	Array of **ListEngineProductsEntity** objects	Product specification details.

Table 5-122 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.
charging_mode	Array of strings	Billing mode. • **monthly**: yearly/monthly • **hourly**: pay-per-use
ios	Array of **ListEngineIosEntity** objects	List of supported disk I/O types.
support_features	Array of objects	List of features supported by instances of the current specifications.

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Parameter	Type	Description
properties	**ListEnginePropertiesEntity** object	Attribute of instances of the current specifications.

Table 5-123 ListEngineIosEntity

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

Table 5-124 ListEnginePropertiesEntity

Parameter	Type	Description
step_length	String	Node quantity increase step.
max_queue_per_broker	String	Maximum queues per broker.
max_connection_per_broker	String	Maximum number of connections on each broker.
max_partition_per_broker	String	Maximum number of partitions of each broker.
max_broker	String	Maximum number of brokers.
max_storage_per_node	String	Maximum storage space of each broker. Unit: 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. Unit: GB
max_tps_per_broker	String	Maximum TPS of each broker.
product_alias	String	Alias of **product_id**.

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Example Requests

```
GET https://{endpoint}/v2/rabbitmq/products
```

Example Responses

Status code: 200

Product specifications are queried successfully.

Successful.


```
{
  "engine" : "rabbitmq",
  "versions" : [ "3.8.35" ],
  "products" : [ {
    "type" : "single",
    "product_id" : "c6.2u4g.single",
    "ecs_flavor_id" : "c6.large.2",
    "billing_code" : "dms.platinum.c6",
    "arch_types" : [ "X86" ],
    "charging_mode" : [ "monthly", "hourly" ],
    "ios" : [ {
      "io_spec" : "dms.physical.storage.ultra.v2",
      "type" : "evs",
      "available_zones" : [ "xxx" ],
      "unavailable_zones" : [ "xxx" ]
    }, {
      "io_spec" : "dms.physical.storage.high.v2",
      "type" : "evs",
      "available_zones" : [ "xxx" ],
      "unavailable_zones" : [ "xxx" ]
    } ],
    "support_features" : [ ],
    "properties" : {
      "max_connection_per_broker" : "2000",
      "max_broker" : "1",
      "max_queue_per_broker" : "100",
      "max_storage_per_node" : "30000",
      "min_broker" : "1",
      "step_length" : "0",
      "min_storage_per_node" : "200",
      "product_alias" : "rabbitmq.2u4g.single"
    }
  }, {
    "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" ],
      "unavailable_zones" : [ "xxx" ]
    }, {
      "io_spec" : "dms.physical.storage.ultra.v2",
      "type" : "evs",
      "available_zones" : [ "xxx" ],
      "unavailable_zones" : [ "xxx" ]
    } ],
    "support_features" : [ ],
    "properties" : {
      "max_connection_per_broker" : "4500",
      "max_broker" : "7",
      "max_queue_per_broker" : "400",
      "max_storage_per_node" : "30000",
```


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```
    "min_broker" : "3",
    "step_length" : "2",
    "min_storage_per_node" : "100",
    "product_alias" : "rabbitmq.4u8g.cluster"
   }
  } ]
}
```

SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ListEngineProductsSolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ListEngineProductsRequest request = new ListEngineProductsRequest();
        request.withEngine(ListEngineProductsRequest.EngineEnum.fromValue("{engine}"));
        try {
            ListEngineProductsResponse response = client.listEngineProducts(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

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

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```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *

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

    credentials = BasicCredentials(ak, sk)

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

    try:
        request = ListEngineProductsRequest()
        request.engine = "{engine}"
        response = client.list_engine_products(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListEngineProductsRequest{}
    request.Engine = model.GetListEngineProductsRequestEngineEnum().ENGINE
    response, err := client.ListEngineProducts(request)
    if err == nil {
```

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

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	Product specifications are queried successfully.

Error Codes

See **Error Codes**.

5.11.4 Querying Instance Monitoring Dimensions

Function

This API is used to query instance monitoring dimensions.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/{project_id}/instances/{instance_id}/ces-hierarchy

Table 5-125 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see **Obtaining a Project ID**.
instance_id	Yes	String	Instance ID.

Request Parameters

None

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Response Parameters

Status code: 200

Table 5-126 Response body parameters

Parameter	Type	Description
dimensions	Array of **dimensions** objects	Monitoring dimensions.
instance_ids	Array of **instance_ids** objects	Instance information.
nodes	Array of **nodes** objects	Node information.
queues	Array of **queues** objects	Queue information.
vhosts	Array of **vhosts** objects	Virtual host information.
exchanges	Array of **exchanges** objects	Exchange information.
groups	Array of **groups** objects	Consumer group information.

Table 5-127 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 **children** objects	List of secondary dimensions.

Table 5-128 children

Parameter	Type	Description
name	String	Secondary dimension name.

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Parameter	Type	Description
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 5-129 instance_ids

Parameter	Type	Description
name	String	Instance ID.

Table 5-130 nodes

Parameter	Type	Description
name	String	Node name.
available_zone	String	AZ.

Table 5-131 queues

Parameter	Type	Description
name	String	Queue name.
vhost	String	Corresponding virtual host.

Table 5-132 vhosts

Parameter	Type	Description
name	String	Virtual host name.

Table 5-133 exchanges

Parameter	Type	Description
name	String	Exchange name.
vhost	String	Corresponding virtual host.

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Table 5-134 groups

Parameter	Type	Description
name	String	Consumer group name.

Example Requests

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

Example Responses

Status code: 200

The query is successful.


```
{
  "dimensions" : [ {
    "name" : "rabbitmq_instance_id",
    "metrics" : [ "connections", "channels", "queues", "consumers", "messages_ready",
"messages_unacknowledged", "publish", "deliver", "deliver_no_ack", "deliver_get", "instance_bytes_in_rate",
"instance_bytes_out_rate", "instance_disk_usage" ],
    "key_name" : [ "instance_ids" ],
    "dim_router" : [ "rabbitmq_instance_id" ]
  }, {
    "name" : "rabbitmq_node",
    "metrics" : [ "fd_used", "socket_used", "proc_used", "mem_used", "disk_free", "rabbitmq_alive",
"rabbitmq_disk_usage", "rabbitmq_cpu_usage", "rabbitmq_cpu_core_load", "rabbitmq_memory_usage",
"rabbitmq_disk_read_await", "rabbitmq_disk_write_await", "rabbitmq_node_bytes_in_rate",
"rabbitmq_node_bytes_out_rate", "rabbitmq_node_queues", "rabbitmq_memory_high_watermark",
"rabbitmq_disk_insufficient" ],
    "key_name" : [ "nodes" ],
    "dim_router" : [ "rabbitmq_instance_id", "rabbitmq_node" ]
  }, {
    "name" : "rabbitmq_queue",
    "metrics" : [ "queue_messages_unacknowledged", "queue_messages_ready" ],
    "key_name" : [ "queues" ],
    "dim_router" : [ "rabbitmq_instance_id", "rabbitmq_queue" ]
  } ],
  "instance_ids" : [ {
    "name" : "0e16280d-7451-4f5b-80fa-f210372ce657"
  } ],
  "nodes" : [ {
    "name" : "dms-vm-0e16280d-rabbitmq-0",
    "available_zone" : "cn-north-7c"
  }, {
    "name" : "dms-vm-0e16280d-rabbitmq-1",
    "available_zone" : "cn-north-7c"
  }, {
    "name" : "dms-vm-0e16280d-rabbitmq-2",
    "available_zone" : "cn-north-7c"
  } ],
  "queues" : [ {
    "name" : "Vhost-17130843__Queue-21084756",
    "vhost" : "default"
  } ],
  "vhosts" : [ {
    "name" : "default"
  } ],
  "exchanges" : [ {
    "name" : "direct_exchange",
    "vhost" : "default"
  } ],
  "groups" : [ ]
}
```


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SDK Sample Code

The SDK sample code is as follows.

Java

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

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


public class ShowCesHierarchySolution {

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

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

        RabbitMQClient client = RabbitMQClient.newBuilder()
                .withCredential(auth)
                .withRegion(RabbitMQRegion.valueOf("<YOUR REGION>"))
                .build();
        ShowCesHierarchyRequest request = new ShowCesHierarchyRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowCesHierarchyResponse response = client.showCesHierarchy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkrabbitmq.v2.region.rabbitmq_region import RabbitMQRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkrabbitmq.v2 import *
```

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowCesHierarchyRequest()
        request.instance_id = "{instance_id}"
        response = client.show_ces_hierarchy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := rabbitmq.NewRabbitMQClient(
        rabbitmq.RabbitMQClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

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```
  }
}
```

More

For SDK sample code of more programming languages, see the Sample Code tab in **API Explorer**. SDK sample code can be automatically generated.

Status Codes

Status Code	Description
200	The query is successful.

Error Codes

See **Error Codes**.

5.11.5 Querying RabbitMQ Product vCPUs

Function

This API is used to query the number of vCPUs of a RabbitMQ product.

Calling Method

For details, see **Calling APIs**.

URI

GET /v2/rabbitmq/products/cores

Table 5-135 Query Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.
product_id	Yes	String	Product ID.

Request Parameters

None

Response Parameters

Status code: 200

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Table 5-136 Response body parameters

Parameter	Type	Description
core_num	Integer	Number of vCPUs.

Example Requests

```
GET https://{endpoint}/v2/rabbitmq/products/cores
```

Example Responses

Status code: 200

Successful

```
{
  "core_num" : 100
}
```

Status Codes

Status Code	Description
200	Successful

Error Codes

See **Error Codes**.

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6 Permissions and Supported Actions

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

By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies to these groups. The user then inherits permissions from the groups it is a member of. This process is called authorization. After authorization, the user can perform specified operations on cloud 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

You can use policies to allow or deny access to specific APIs.

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 that 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

DMS provides system-defined policies, which can be directly used in IAM. You can also create custom policies to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are basic 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.

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- IAM projects or enterprise projects: A custom policy can be applied to IAM projects or enterprise projects or both. 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. For details about the differences between IAM and enterprise projects, see **What Are the Differences Between IAM and Enterprise Management?**

DMS for RabbitMQ 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 RabbitMQ actions

Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Creating an Instance	POST /v2/{project_id}/instances	dms:instance:create	√	√
Deleting an Instance	DELETE /v2/{project_id}/instances/{instance_id}	dms:instance:delete	√	√
Modifying an Instance	PUT /v2/{project_id}/instances/{instance_id}	dms:instance:modify	√	√
Querying an Instance	GET /v2/{project_id}/instances/{instance_id}	dms:instance:get	√	√
Deleting Instances in Batches	POST /v2/{project_id}/instances/action	dms:instance:delete	√	√
Listing All Instances	GET /v2/{project_id}/instances	dms:instance:list	√	√
Listing Plug-ins	GET /v2/{project_id}/instances/{instance_id}/rabbitmq/plugins	dms:instance:list	√	√

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Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Enabling or Disabling a Plug-in	PUT /v2/{project_id}/instances/{instance_id}/rabbitmq/plugins	dms:instance:modify	√	√
Resetting a Password	POST /v2/{project_id}/instances/{instance_id}/password	dms:instance:resetAuthInfo	√	√
Modifying Instance Specifications	POST /v2/{project_id}/instances/{instance_id}/extend	dms:instance:scale	√	√
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	√	√
Deleting a Background Task	GET /v2/{project_id}/instances/{instance_id}/tasks/{task_id}	dms:instance:deleteBackgroundTask	√	√
Adding or Deleting Instance Tags in Batches	POST /v2/{project_id}/rabbitmq/{instance_id}/tags/action	dms:instance:modify	√	√
Listing Tags of an Instance	GET /v2/{project_id}/rabbitmq/{instance_id}/tags	dms:instance:get	√	√
Querying Project Tags	GET /v2/{project_id}/rabbitmq/tags	dms:instance:get	√	√

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Permissions	APIs	Actions	IAM Projects	Enterprise Projects
Enabling or Disabling Public Access	PUT /v2/{project_id}/instances/{instance_id}	dms:instance:modify	√	√

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7 Out-of-Date APIs

7.1 APIs V1

7.1.1 APIs for Managing Instances

7.1.1.1 Creating an Instance

NOTE

This API is an out-of-date version 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 Parameter description

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

Request

Request parameters

Table 7-2 describes the request parameters.

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Table 7-2 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 • 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: • Must be a string consisting of 8 to 32 characters. • Must contain at least two of the following character types: – Lowercase letters – Uppercase letters – Digits – Special characters `~!@#$%^&*()-_=+|[{}];:',<.>/?

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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 an empty array or an empty array. 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. • 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.

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Parameter	Type	Mandatory	Description
maintain_end	String	No	Indicates the time at which a 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. 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	Indicates whether to enable public access for a RabbitMQ instance. • **true**: enable • **false**: disable
publicip_id	String	No	Indicates the ID of the elastic IP address (EIP) bound to a RabbitMQ instance. This parameter is mandatory if public access is enabled (that is, **enable_publicip** is set to **true**).
ssl_enable	Boolean	No	Indicates whether to enable SSL-encrypted access. • **true**: enable • **false**: disable
storage_spec_code	String	Yes	Indicates storage I/O specification. For details on how to select a disk type, see **Disk Types and Performance**. Options: • dms.physical.storage.normal • dms.physical.storage.high • dms.physical.storage.ultra
enterprise_project_id	String	No	Indicates the enterprise project ID.

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Example request for creating a RabbitMQ instance

```
{
   "name": "rabbitmq-demo",
   "description": "",
   "engine": "RabbitMQ",
   "engine_version": "3.x.x",
   "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 7-3 describes the response parameter.

Table 7-3 Parameter description

Parameter	Type	Description
instance_id	String	Indicates the instance ID.

Example response

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

Status Code

Table 7-4 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 7-4 Status code

Status Code	Description
200	The instance is created successfully.

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7.1.1.2 Querying an Instance

NOTE

This API is an out-of-date version 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 7-5 describes the parameters.

Table 7-5 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 7-6 describes the response parameters.

Table 7-6 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.

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Parameter	Type	Description
specification	String	Indicates the instance specification. • 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_address	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.

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Parameter	Type	Description
resource_spec_code	String	Indicates the resource specifications identifier. • **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	Indicates the instance type. Options: • **single**: single-node instance • **cluster**: cluster instance

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Parameter	Type	Description
charging_mode	Integer	Indicates the billing mode. **1**: pay-per-use mode; **0**: yearly/monthly billing.
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 7-7**.
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. This parameter has a value only when the billing mode is yearly/monthly.
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

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Parameter	Type	Description
enable_publicip	Boolean	Indicates whether to enable public access for a RabbitMQ instance. • **true**: enable • **false**: disable
publicip_address	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. • **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. • **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 7-7 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.

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Error Code	Description
public.00.0006	Failed to create the subnet.
public.00.0007	The subnet status is abnormal.
public.00.0008	Failed to create the ECS.
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.x.x",
   "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": "XXXXXXXXX",
   "maintain_begin" : "22:00",
   "maintain_end" : "02:00",
```


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```
  "enable_publicip" : "true",
  "publicip_id": "b7940732-11ef-459b-acab-cab0d26c74a3",
  "publicip_address": "192.168.10.5",
  "ssl_enable": false,
  "management_connect_address": "http://192.168.0.177:9999"
}
```

Status Code

Table 7-8 describes the status code of successful operations. For details about other status codes, see Status Code.

Table 7-8 Status code

Status Code	Description
200	Specified instance queried successfully.

7.1.1.3 Modifying an Instance

NOTE

This API is an out-of-date version 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 name and description of an instance.

URI

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

Table 7-9 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 7-10 describes the request parameters.

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Table 7-10 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.
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 **\"**.
maintain_begin	String	No	Indicates the time at which a maintenance time window starts. Format: HH:mm:ss. • 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.

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Parameter	Type	Mandatory	Description
maintain_end	String	No	Indicates the time at which a maintenance time window ends. Format: HH:mm:ss. • 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	Indicates whether to enable public access for a RabbitMQ instance. • **true**: enable • **false**: disable
publicip_id	String	No	Indicates the ID of the EIP bound to a RabbitMQ instance. This parameter is mandatory if public access is enabled (that is, **enable_publicip** is set to **true**).
enterprise_project_id	String	No	Indicates the enterprise project ID.

Example request

Example 1:

```
{
   "name": "dms002",
```

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```
   "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 7-11 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 7-11 Status code

Status Code	Description
204	The instance is modified successfully.

7.1.1.4 Deleting an Instance

NOTE

This API is an out-of-date version 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 7-12 describes the parameters.

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Table 7-12 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 7-13 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 7-13 Status code

Status Code	Description
204	The instance is deleted successfully.

7.1.1.5 Deleting Instances in Batches

NOTE

This API is an out-of-date version and may not be maintained in the future. Please use the API described in **Batch Deleting Instances**.

Function

This API is used to delete instances in batches.

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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 7-14 describes the parameter.

Table 7-14 Parameter description

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

Request

Request

Table 7-15 describes the request parameters.

Table 7-15 Parameter description

Parameter	Type	Mandatory	Description
action	String	Yes	Indicates the operation to be performed on instances. The value of this parameter can be **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

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",
```

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```
   "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 7-16** describes the parameters.

Table 7-16 Parameter description

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

Table 7-17 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 7-18 describes the status code of successful operations. For details about other status codes, see **Status Code**.

Table 7-18 Status code

Status Code	Description
200	The instance is deleted successfully.

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7.1.1.6 Querying All Instances

NOTE

This API is an out-of-date version 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 7-19 describes the parameters.

Table 7-19 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.

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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 **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.
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 7-20 describes the response parameters.

Table 7-20 Parameter description

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

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Table 7-21 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.
specification	String	Indicates the specifications of an instance. • 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_address	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.

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Parameter	Type	Description
resource_spec_code	String	Indicates the resource specifications identifier. • **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; **0**: yearly/monthly billing.
vpc_id	String	Indicates the ID of a VPC.
vpc_name	String	Indicates the name of a VPC.

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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 7-7**.
user_id	String	Indicates the user ID.
user_name	String	Indicates the username.
order_id	String	Indicates an order ID. This parameter has a value only when the billing mode is yearly/monthly mode.
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 to enable public access for a RabbitMQ instance. • **true**: enable • **false**: disable
publicip_address	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. • **true**: enable • **false**: disable
enterprise_project_id	String	Indicates the enterprise project ID.

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Parameter	Type	Description
is_logical_volume	Boolean	Distinguishes old instances from new instances during instance capacity expansion. • **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.x.x",
         "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": "test",
         "access_user": "test-Info",
         "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,
```


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```
            "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 7-22 describes the status code of successful operations. For details about other status codes, see Status Code.

Table 7-22 Status code

Status Code	Description
200	All instances are queried successfully.

7.1.2 Other APIs

7.1.2.1 Querying AZ Information

NOTE

This API is an out-of-date version 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

None.

Response

Response parameters

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Table 7-23 and Table 7-24 describe the parameters.

Table 7-23 Response parameters

Parameter	Type	Description
regionId	String	Indicates the region ID.
available_zones	Array	Indicates details of AZs. For details, see Table 7-24.

Table 7-24 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. • **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 7-25 describes the status code of successful operations. For details about other status codes, see Status Code.

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Table 7-25 Status code

Status Code	Description
200	The AZ information is successfully queried.

7.1.2.2 Querying Product Specifications

NOTE

This API is an out-of-date version 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 ID (parameter **product_id**) which indicates the specifications of the service you purchased.

URI

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

Table 7-26 describes the parameter.

Table 7-26 Parameter description

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

Request

Request parameters

None.

Example Request

None.

Response

Response parameters

Table 7-27 describes the response parameters.

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Table 7-27 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 7-28 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 7-29 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 7-30 detail parameter description of cluster RabbitMQ instances

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

Table 7-31 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.

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Parameter	Type	Description
product_id	String	Indicates the product ID.
spec_code	String	Indicates the specification ID.

Table 7-32 io parameter description

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

Example response

List of RabbitMQ instance specifications:

```
{
  "Hourly": [
    {
      "name": "RabbitMQ",
      "version": "3.x.x",
      "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"
```

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```
          }
         ],
         "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"
        },
        {
         "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"
            }
```


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```
        ],
        "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"
```


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```
      },
      {
        "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": [
```


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```
            {
              "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.x.x",
  "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",
```


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```
      "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"
        },
        {
          "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": [
    {
```


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```
      "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",
```


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```
            "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 7-33 describes the status code of successful operations. For details about other status codes, see **Status Code**.

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Table 7-33 Status code

Status Code	Description
200	Product specifications queried successfully.

7.1.2.3 Querying Maintenance Time Windows

NOTE

This API is an out-of-date version 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

None.

Response

Response parameters

Table 7-34 and **Table 7-35** describe the response parameters.

Table 7-34 Parameter description

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

Table 7-35 maintain_windows parameter description

Parameter	Type	Description
seq	Integer	Indicates the sequential number of a maintenance time window.

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Parameter	Type	Description
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 7-36 describes the status code of successful operations. For details about other status codes, see **Status Code**.

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Table 7-36 Status code

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

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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.

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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.

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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 exits.
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.

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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 Codes

If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in **API Gateway Error Codes**.

Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400002	The project ID format is invalid.	Invalid project ID.	Check the project ID format.
400	DMS.00400004	The request body is empty.	The request body is empty.	Check the request body.

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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.

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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 lettersUppercase lettersDigitsSpecial 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.

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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.

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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.

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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.

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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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400077	Insufficient IPs in the selected subnet.	Too few IP addresses in the selected subnet.	Select another subnet with sufficient IP addresses.
400	DMS.00400081	Duplicate instance name.	The instance name already exists.	Check the instance name.
400	DMS.00400082	Instance id is repeated.	The instance ID already exists.	Check the instance ID.
400	DMS.00400085	The message body contains invalid characters or is not in JSON format. The error key is <key>.	The message body is not in JSON format or contains invalid characters.	Check the message body.
400	DMS.00400099	The following instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	Instances ({}) in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	Check the instance status.
400	DMS.00400100	The instances array can contain a maximum of 50 instance IDs.	The instances array can contain a maximum of 50 instance IDs.	Check the instance quantity.

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Status Code	Error Codes	Error Message	Description	Solution
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.
400	DMS.00400102	The number of partitions created for a Kafka topic must be within the range of 1-200.	The number of partitions created for a topic in a Kafka instance must be within the range of 1-200.	Check the number of partitions of the topic.
400	DMS.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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400107	The instance exists for unpaid sacle 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 sacle up order. Please try again later.	A specification modification order for the instance is being processed.	Try again later.
400	DMS.00400124	The maximum number of disk expansion times has been reached.	The maximum number of disk expansion times has been reached.	Check the maximum number of disk expansion times.
400	DMS.00400125	Invalid SPEC_CODE.	Invalid SPEC_CODE.	Check SPEC_CODE.
400	DMS.00400126	Invalid period time.	Invalid time period for yearly/ monthly billing.	Check the time period for yearly/ monthly billing.
400	DMS.00400127	Instance not support to change retention_policy.	The instance does not support retention policy changes.	Contact technical support.
400	DMS.00400128	Invalid public access parameters.	Invalid public access parameters.	Check the public access parameters.
400	DMS.00400129	Current instance version is less than required.	The instance version does not support this operation.	Contact technical support.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400133	Sink task quota for connector invalid.	Invalid connector task quota.	Contact technical support.
400	DMS.00400134	There is another order need to pay first.	An unpaid order exists.	Pay for the order first.
400	DMS.00400135	Not support disk encrypted.	Disk encryption is not supported.	Do not enable disk encryption.
400	DMS.00400136	Disk encrypted key is null.	The disk encryption key is empty.	Check the disk encryption key.
400	DMS.00400137	Disk encrypted key state is not enabled.	The disk encryption key is not enabled.	Enable the disk encryption key.
400	DMS.00400142	Timestamp is invalid.	Timestamp is invalid.	Enter a correct timestamp.
400	DMS.00400500	Invalid disk space.	Invalid disk space.	Check the disk space.
400	DMS.00400800	Invalid request parameter. Check the request parameter.	Invalid request parameter.	Check the request parameters.
400	DMS.00400861	Replication factor larger than available brokers.	The number of replicas in the topic to be created is greater than the number of available brokers.	Contact technical support.
400	DMS.00400867	Failed to create the Smart Connect task.	Failed to create the Smart Connect task.	Contact technical support.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00400868	Failed to stop the Smart Connect task.	Failed to stop the Smart Connect task.	Try again later.
400	DMS.00400869	Failed to start the Smart Connect task.	Failed to start the Smart Connect task.	Try again later.
400	DMS.00400870	Failed to verify the Smart Connect task.	Failed to verify the Smart Connect task.	Try again later.
400	DMS.00400872	Failed to restart the Smart Connect task.	Failed to restart the Smart Connect task.	Try again later.
400	DMS.00400873	Failed to modify the Smart Connect task.	Failed to modify the Smart Connect task.	Contact technical support.
400	DMS.00400874	The topic has been used in another Smart Connect task.	The topic has been used in another Smart Connect task.	Check the topic and try again.
400	DMS.00400875	Inconsistent source and target Redis instance types in the Smart Connect task.	Inconsistent source and target Redis instance types in the Smart Connect task.	Change the source and target Redis instance types and try again.
400	DMS.00400876	The topic does not exist.	The topic does not exist.	Check the topic and try again.
400	DMS.00400970	RabbitMQ plugin is not exist	Invalid plugin name	Check the plugin list.
400	DMS.00400971	The instance ssl is off.	The instance ssl is off.	View the instance details and check whether SSL is enabled.
400	DMS.00400975	Failed to query topics.	Failed to query topics.	Check whether the topic exists.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.00404033	Does not support extend rabbitMQ disk space.	The RabbitMQ disk space cannot be expanded.	Scale out the RabbitMQ cluster.
400	DMS.00500033	Failed to access EPS to update the project	Failed to access EPS to update the project	Contact technical support.
400	DMS.00500960	Invalid user AK/SK.	Invalid user AK/SK.	Correct the user AK/SK and try again.
400	DMS.00500986	Your account has been restricted.	Your account is suspended.	Contact the billing center.
400	DMS.00500987	Balance is not enough	Insufficient balance.	Top up your account and try again later.
400	DMS.10240002	The number of queried queues exceeds the upper limit.	The maximum number of queried queues has been reached.	Check the queue quantity.
400	DMS.10240004	The tag name is invalid.	Invalid tag name.	Check the tag name.
400	DMS.10240005	The project ID format is invalid.	Invalid project ID.	Check the project ID format.
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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10240010	The description contains invalid characters.	The description contains invalid characters.	Check the description.
400	DMS.10240011	The name length must be 1 to 64 characters.	The name can contain 1 to 64 characters.	Check the name length.
400	DMS.10240012	The name length must be 1 to 32 characters.	The name can contain 1 to 32 characters.	Check the name length.
400	DMS.10240013	The description length must not exceed 160 characters.	The description can contain a maximum of 160 characters.	Check the description length.
400	DMS.10240014	The number of consumable messages exceeds the maximum limit.	The number of consumable messages is not within the allowed range.	Check the number of consumable messages.
400	DMS.10240015	The queue ID format is invalid.	Invalid queue ID.	Check the queue ID.
400	DMS.10240016	The group ID format is invalid.	Invalid group ID.	Check the group ID.
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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10240020	The quota is insufficient.	Insufficient quota.	Check the quota.
400	DMS.10240021	The value of time_wait is not within the value range of 1-60.	The value of time_wait is not within the range of 1-60.	Check the value of time_wait.
400	DMS.10240022	The value of max Consume Count must be within the range of 1-100.	The value of max Consume Count must be within the range of 1-100.	Check the value of max Consume Count.
400	DMS.10240027	The value of retention_hours must be an integer in the range of 1-72.	The value of retention_hours must be an integer in the range of 1-72.	Check the value of retention_hours.
400	DMS.10240028	Non-kafka queues do not support retention_hours.	Non-kafka queues do not support retention_hours.	Check whether the queue is a Kafka queue. If not, do not set retention_hours.
400	DMS.10240032	The queue is being created.	The queue is being created.	Check whether the queue is being created.
400	DMS.10240035	The tag key is empty or too long.	The tag key of the queue is empty or too long.	Check the tag key of the queue.
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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10240040	You can only create or delete tags.	You can only create or delete tags.	Check whether the operation meets the requirements.
400	DMS.10240041	You can only filter or count tags.	You can only filter or count tags.	Check whether the operation meets the requirements.
400	DMS.10240042	The number of records on each page for pagination query exceeds the upper limit.	The number of records on each page for pagination query exceeds the upper limit.	Check the page size.
400	DMS.10240043	The number of skipped records for pagination query exceeds the upper limit.	The offset for pagination query exceeds the upper limit.	Check the paging offset.
400	DMS.10240044	A maximum of 10 tags can be created.	A maximum of 10 tags can be created.	Check the tag quantity.
400	DMS.10240045	The tag key has been used.	The tag key has been used.	Check whether the tag key has been used.
400	DMS.10540001	The message body contains invalid fields.	The message body contains invalid fields.	Check the message body.
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.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10540010	The request format is incorrect	The request format is incorrect. {Error description}	Check the request format.
400	DMS.10540011	The message size is {message size}, larger than the size limit {max allowed size}.	The message size is {message size}, larger than the size limit {max allowed size}.	Check the request body size.
400	DMS.10540012	The message body is not in JSON format or contains invalid characters.	The message body is not in JSON format or contains invalid characters.	Check the message body format.
400	DMS.10540014	The URL contains invalid parameters.	The URL contains invalid parameters.	Check the URL parameters.
400	DMS.10540202	The request format is incorrect	The request format is incorrect. {Error description}	Check the request format.
400	DMS.10542204	Failed to consume messages due to {desc}.	Failed to consume messages. {Error description}	Check the error information and rectify the fault accordingly.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.10542205	Failed to obtain the consumption instance because the handler does not exist. This may be because the consumer instance is released 1 minute after the message is consumed. As a result, the consumer instance fails to be obtained from the handler.	Failed to obtain the consumption instance because the handler does not exist. This may be because the consumer instance is released 1 minute after the message is consumed.	Check the handler.
400	DMS.10542206	The value of ack_wait must be within the range of 15-300.	The value of ack_wait must be within the range of 15-300.	Check the value of ack_wait.
400	DMS.10542209	The handler does not exist because the handler fails to be parsed, the message consumption times out, or the message consumption is repeatedly acknowledged.	The handler does not exist because the handler fails to be parsed, the message consumption times out, or the message consumption is repeatedly acknowledged.	Check whether the handler or consumption acknowledgment times out.
400	DMS.10542214	The request format is incorrect	The request format is incorrect. {Error description}	Check the request format.

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Status Code	Error Codes	Error Message	Description	Solution
400	DMS.111400860	Instance partition is not enough.Total partition is over the partition limitation.	Instance partition is not enough. Total partition is over the partition limitation.	Check whether the partition quantity is exceeded.
400	DMS.50050004	The consumer group is offline.	The consumer group is offline.	Start the consumer instance in the consumer group.
401	DMS.10240101	Invalid token.	Invalid token.	Check whether the token is valid.
401	DMS.10240102	Expired token.	The token has expired.	Check whether the token has expired.
401	DMS.10240103	Missing token.	The token is missing.	Check whether the token is missing.
401	DMS.10240104	The project ID and token do not match.	The project ID and token do not match.	Check whether the project ID matches the token.
403	DMS.00403002	A tenant has the read-only permission and cannot perform operations on DMS.	You cannot perform operations on DMS because you only have read permissions.	Check the tenant permission.
403	DMS.00403003	This role does not have the permissions to perform this operation.	This role does not have the permissions to perform this operation.	Check the role permission.
403	DMS.00403007	Authorization denied.	Action does not allow to performed.	Plese check your permissions.

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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.
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.

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Status Code	Error Codes	Error Message	Description	Solution
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.00404024	Connector does not exist.	Connector does not exist.	Check the connector.
404	DMS.00404026	The dumping task does not exist.	The dumping task does not exist.	Check the dumping task.
404	DMS.00404027	Connector already exists.	Connector already exists.	Check the connector.
404	DMS.00404029	The dumping task quota has been reached.	The dumping task quota has been reached.	Check the dumping task quota.
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.

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Status Code	Error Codes	Error Message	Description	Solution
404	DMS.10240407	The request is too frequent. Flow control is being performed. Please try again later.	The request is sent too frequently and flow control is being performed. Please try again later.	Try again later.
404	DMS.10240426	No tag containing this key exists.	No tags containing this key exist.	Check the tag.
404	DMS.10540401	The queue name does not exist.	The queue name does not exist.	Check whether the queue name exists.
405	DMS.00405001	This request method is not allowed.	The request method is not allowed.	Check the request method.
408	DMS.111501024	Query timed out	Message query timeout	Please query later
500	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.

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Status Code	Error Codes	Error Message	Description	Solution
500	DMS.00500054	Internal service error.	Failed to generate the password.	Contact technical support.
500	DMS.00500070	Internal service error.	Failed to configure the instance.	Contact technical support.
500	DMS.00500071	Internal service error.	Failed to create the instance backup policy.	Contact technical support.
500	DMS.00500094	Internal service error.	Internal service error.	Contact technical support.
500	DMS.00500106	Internal service error.	Internal service error.	Contact technical support.
500	DMS.00500990	Failed to update topics.	Failed to update topics.	Contact technical support.
500	DMS.00501000	Failed to create agency, may be you do not have the agency permission.	Failed to create agency	check whether the current user has the agency permission.
500	DMS.00501001	Failed to get agency roleId.	Failed to get agency roleId.	retry the request later
500	DMS.00501002	Failed to query agency roleId.	Failed to query the role ID based on the role name.	Check whether the role name in the request is correct.
500	DMS.00501003	Failed to grant role to agency.	Failed to grant role to agency.	Try again later, or contact technical support
500	DMS.00501010	The product specification does not exist.	The product specification does not exist.	Contact technical support.
500	DMS.00501011	Failed to query the product ID from CBC.	Failed to query the product ID from CBC.	Contact technical support.

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Status Code	Error Codes	Error Message	Description	Solution
500	DMS.00501012	Smart Connect tasks exist.	Smart Connect tasks exist.	Delete all Smart Connect tasks.
500	DMS.10250002	Internal service error.	Internal service error.	Contact technical support.
500	DMS.10250003	Internal service error.	Internal service error.	Contact technical support.
500	DMS.10250004	Internal service error.	Internal service error.	Contact technical support.
500	DMS.10250005	Internal communication error.	Internal communication error.	Contact technical support.
500	DMS.10250006	Internal service error.	Internal service error.	Contact technical support.
500	DMS.10550035	tag_type must be either or or and.	tag_type must be either 'or' or 'and'.	Check tag_type.
501	DMS.111501026	Query reach maximum byte	The total number of bytes in the query exceeds the upper limit.	Shorten the time range to ensure that the number of queried bytes does not exceed the limit, or use other methods to query data.
503	DMS.111501025	Query Busy. Please try again later.	Message query busy	Please query later

8.3 Instance Status

Table 8-2 Instance status description

Status	Description
CREATING	The instance is being created.
RUNNING	The instance is running properly. Instances in this state can provide services.
ERROR	The instance is not running properly.

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Status	Description
RESTARTING	The instance is being restarted.
STARTING	The status between **Frozen** and **Running**.
EXTENDING	The instance specifications are being changed.
EXTENDEDFAILED	The instance specifications failed to be changed.
FROZEN	The instance has been frozen due to insufficient account balance. You can unfreeze the instance by topping up your account in **My Order**.
FREEZING	The status between **Running** and **Frozen**.
UPGRADING	The instance is being upgraded.
ROLLINGBACK	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",
```

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```
            "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.

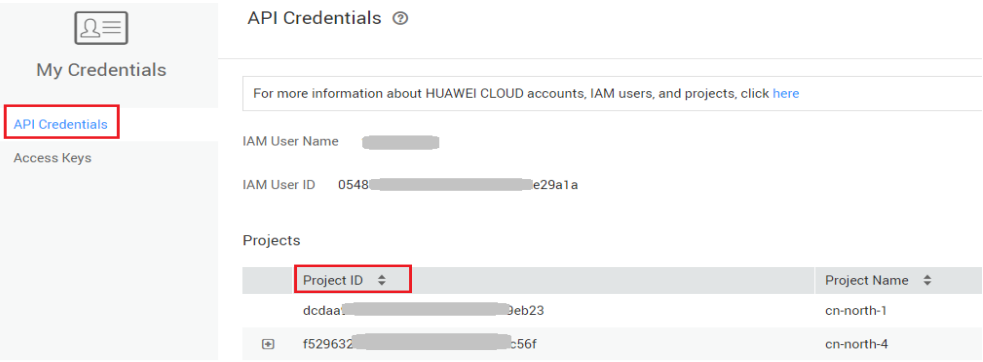
The following procedure describes how to obtain a project ID:

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

The account name and account ID are required for some URLs when an API is called. The following procedure describes how to obtain the domain and domain ID:

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

   View the account name and account ID.

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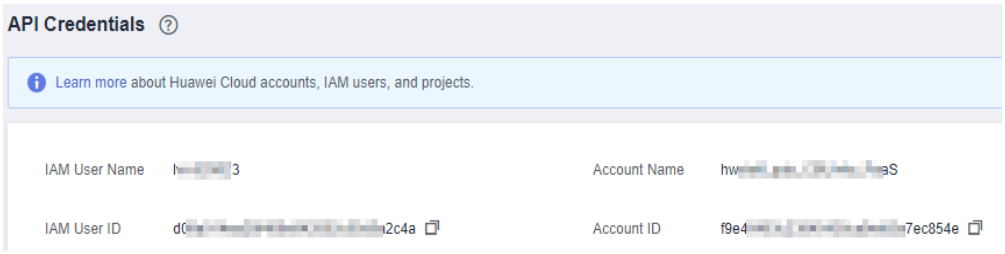
Figure 8-2 Viewing the account name and account ID



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A Change History

Released on	Description
2024-12-24	This release incorporates the following change: • Added an API for **Querying RabbitMQ Product vCPUs**.
2024-07-17	This release incorporates the following change: • Added APIs for managing **virtual hosts**, **exchanges**, **queues**, **bindings**, and **users**.
2023-05-08	This issue incorporates the following change: • Added the **bss_param** parameter for creating a yearly/monthly instance in **Creating an Instance**.
2022-03-23	Modified the following content: • Modified the APIs for querying product information for instance specification modification and modifying instance specifications to adapt to modification of instances with new flavors.
2021-12-14	Modified the following content: • Changed the APIs from V1 to V2 in **Permissions and Supported Actions**.
2021-11-16	Modified the following content: • Added V2 APIs.
2020-10-27	This issue is the first official release.

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