

# Distributed Cache Service (DCS)

## API Reference

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# 1 Before You Start

---

Welcome to Distributed Cache Service (DCS). DCS is an online, distributed, in-memory cache service compatible with Redis. It is reliable, scalable, usable out of the box, and easy to manage, meeting your requirements for high read/write performance and fast data access.

In addition to the web console, you can also invoke APIs for managing your DCS O&M resources. This document describes how to use application programming interfaces (APIs) to perform operations on DCS, such as creating, deleting, and scaling up DCS instances. For details about all supported operations, see [API Overview](#).

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

---

## NOTICE

- Some APIs are supported only in certain regions.
  - DCS is continuously upgraded with new functions, and the existing APIs are inevitably adjusted. For example, new response parameters may be added.
  - To reduce the impact of API changes, DCS is backward compatible with APIs when possible. However, when you use DCS, you should accept and ignore unused parameters and parameter values in returned content (in JSON format).
- 

## Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. Contact the administrator to obtain regions endpoints.

## Concepts

- **Account**  
An account is created upon successful registration. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used directly to perform routine management. To ensure

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

- IAM user

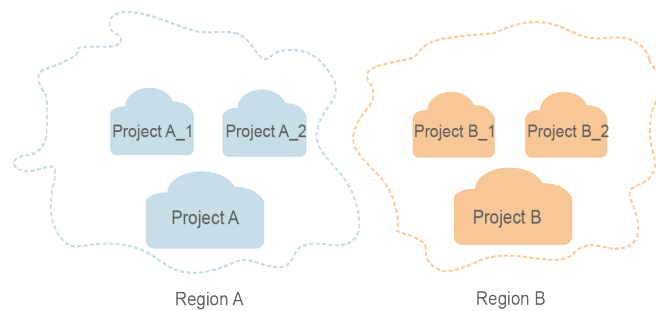
A user is created in IAM to use cloud services. Each user has its own identity credentials (password and access keys).

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

- Regions are geographic areas isolated from each other. Resources are region-specific and cannot be used across regions through internal network connections. For low network latency and quick resource access, select the nearest region.
- An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, compute, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected by high-speed optical fibers for building 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 create resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

**Figure 1-1** Project isolating model



# 2 API Overview

**Table 2-1** APIs provided by DCS

Type	Description
<b>Lifecycle management APIs</b>	Create, query, delete, modify, and scale instances.
<b>Instance management APIs</b>	Restart instances, query instance status, change passwords, and query instance statistics.
<b>Shard and replica management APIs</b>	Configure replica priority and query shard details.
<b>Parameter management APIs</b>	Query and modify instance configuration parameters.
<b>Data migration APIs</b>	Create data migration tasks.
<b>Backup and restoration APIs</b>	Back up and restore instances, and view backup and restoration records.
<b>Log management APIs</b>	Query slow query and Redis run logs.
<b>Background task management APIs</b>	Query and delete background tasks.
<b>Other APIs</b>	Query AZ information, product specifications, and maintenance time window.



# 3 Calling APIs

## 3.1 Making an API Request

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

### Request URI

A request URI is in the following format:

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

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

**Table 3-1** 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 endpoint. The endpoint varies between services in different regions. It can be obtained from the administrator.
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the <b>resource-path</b> of the API used to obtain a user token is <b>/v3/auth/tokens</b> .
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of " <i>Parameter name=Parameter value</i> ". For example, <b>? limit=10</b> indicates that a maximum of 10 data records will be displayed.

#### NOTE

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

## Request Methods

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

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: 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 will be created.

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

```
POST https://{{endpoint}}/v3/auth/tokens
```

## Request Header

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

Common request headers are as follows:

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

#### NOTE

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

For details, see [AK/SK-based Authentication](#).

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

```
POST https://{{endpoint}}/v3/auth/tokens  
Content-Type: application/json
```

## Request Body

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

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

In the case of the API used to obtain a user token, the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Set **username** to the name of a user, **domainname** to the name of the account that the user belongs to, **\*\*\*\*\*** to the user's login password, and **XXXXXXXXXXXXXXXXXXXX** to the project name. You can learn more information about projects from the administrator.

### NOTE

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

```
POST https://{{endpoint}}/v3/auth/tokens
Content-Type: application/json

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

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

## 3.2 Authentication

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

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair. AK/SK-based authentication is recommended because it is more secure than token-based authentication.

## Token-based Authentication

### NOTE

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

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests 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": "*****", //IAM user password. You are advised to store it in ciphertext in the
configuration file or an 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://{{endpoint}}/v3/auth/projects
GET https://iam-apigateway-proxy.{region0_id}-{external_global_domain_name}/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

## AK/SK-based Authentication

AK/SK is used to verify the identity of a request sender. In AK/SK-based authentication, a signature needs to be obtained and then added to requests.

### NOTE

AK: access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.

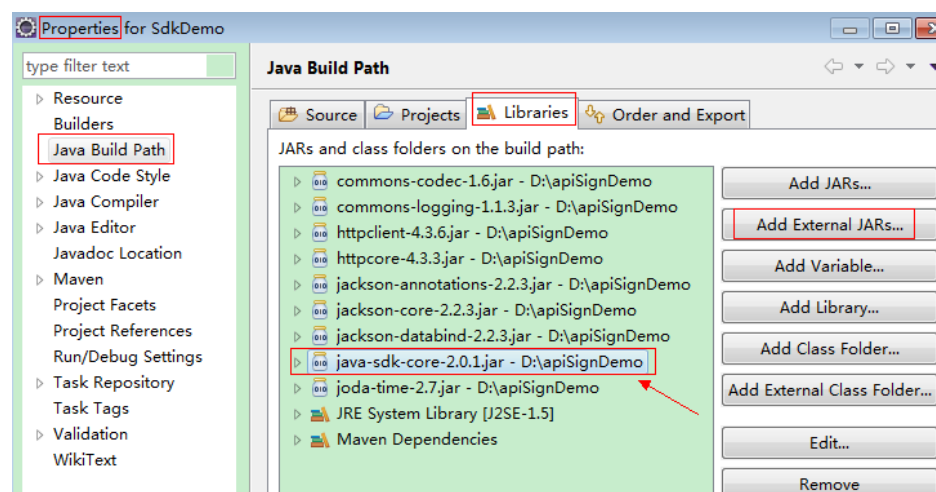
SK: secret access key used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

The following uses a [demo](#) project to show how to sign a request and use an HTTP client to send an HTTPS request.

If you do not need the demo project, obtain the API Gateway signing SDK from the administrator.

Decompress the downloaded package and reference the obtained JAR files as dependencies.

Figure 3-1 Adding the API Gateway signing SDK



**Step 1** Generate an AK/SK. If an AK/SK pair has already been generated, skip this step. Find the downloaded AK/SK file, which is usually named **credentials.csv**.

1. Log in to the management console.
2. Click the username and choose **My Credentials** from the drop-down list.
3. On the **My Credentials** page, click **Access Keys**.
4. Click **Create Access Key**.
5. Enter an access key description and click **OK**.
6. Enter the verification code received by email.

### NOTE

If you have enabled operation protection (**Security Settings > Critical Operations > Operation Protection**), you need to enter the verification code.

For users created in IAM, if no email address or phone number was specified during the user creation, only a login password is required.

7. Click **OK** to download the access key.

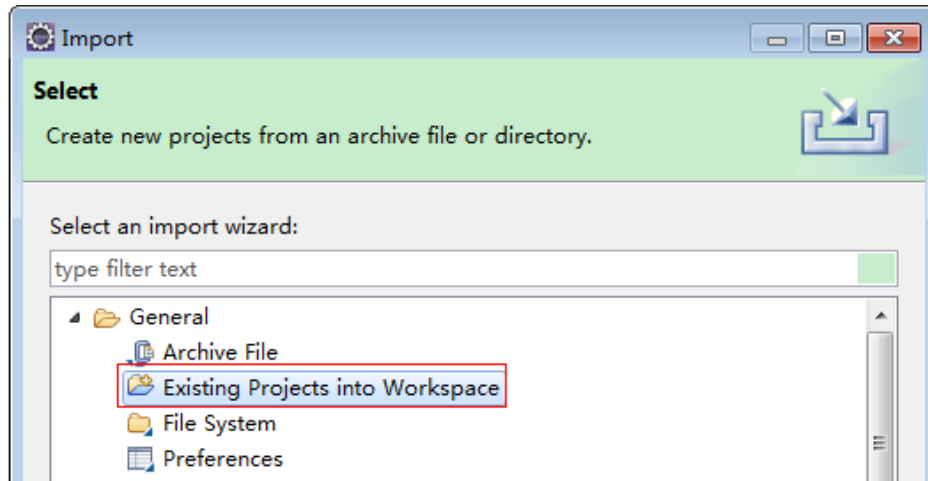
**NOTE**

Keep the access key secure.

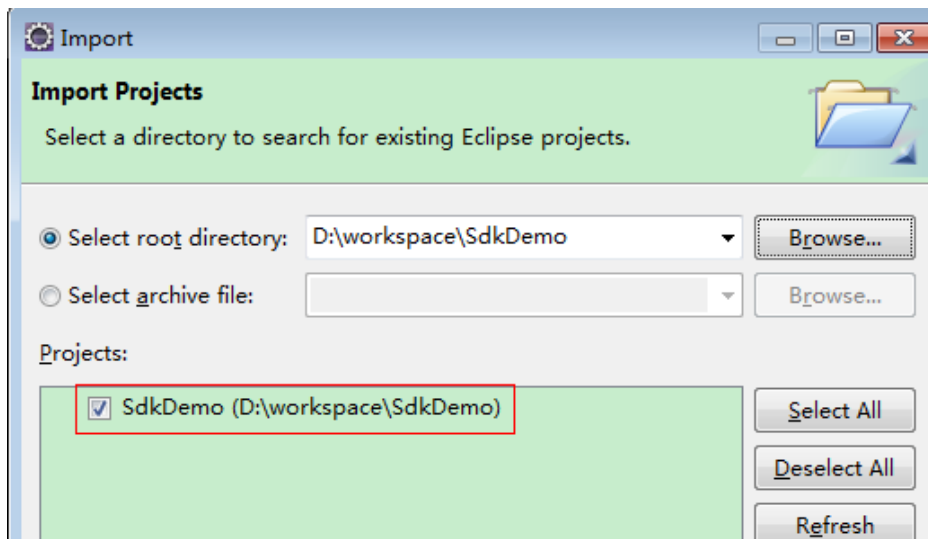
**Step 2** Download and decompress the demo project.

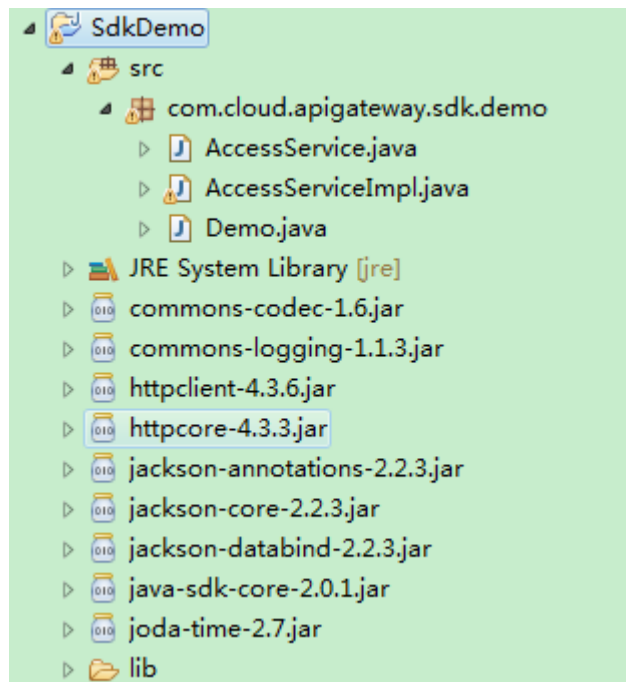
**Step 3** Import the demo project to Eclipse.

**Figure 3-2** Selecting Existing Projects into Workspace



**Figure 3-3** Selecting the demo project



**Figure 3-4** Structure of the demo project**Step 4** Sign the request.

The request signing method is integrated in the JAR files imported in [Step 3](#). The request needs to be signed before it is sent. The signature will then be added as part of the HTTP header to the request.

The demo code is classified into the following classes to demonstrate signing and sending the HTTP request:

- **AccessService**: An abstract class that merges the GET, POST, PUT, and DELETE methods into the **access** method.
- **Demo**: Execution entry used to simulate the sending of GET, POST, PUT, and DELETE requests.
- **AccessServiceImpl**: Implements the **access** method, which contains the code required for communication with API Gateway.

1. Edit the main() method in the **Demo.java** file, and replace the bold text with actual values.

If you use other methods such as POST, PUT, and DELETE, see the corresponding comment.

Specify **region**, **serviceName**, **ak/sk**, and **url** as the actual values. In this demo, the URLs for accessing VPC resources are used.

To obtain the project ID in the URLs, see [Obtaining a Project ID](#).

To obtain the endpoint, contact the administrator.

```
//TODO: Replace region with the name of the region in which the service to be accessed is located.  
private static final String region = "";
```

```
//TODO: Replace vpc with the name of the service you want to access. For example, ecs, vpc, iam, and elb.  
private static final String serviceName = "";
```

```
public static void main(String[] args) throws UnsupportedEncodingException
```

```
{
//TODO: Replace the AK and SK with those obtained on the My Credential page.
String ak = "ZIRRKMTWP*****1WKNKB";
String sk = "Us0mdMNHk*****YrRCnW0ecfzl";

//TODO: To specify a project ID (multi-project scenarios), add the X-Project-Id header.
//TODO: To access a global service, such as IAM, DNS, CDN, and TMS, add the X-Domain-Id header to
specify an account ID.
//TODO: To add a header, find "Add special headers" in the AccessServiceImpl.java file.

//TODO: Test the API
String url = "https://{Endpoint}/v1/{project_id}/vpcs";
get(ak, sk, url);

//TODO: When creating a VPC, replace {project_id} in postUrl with the actual value.
//String postUrl = "https://serviceEndpoint/v1/{project_id}/cloudservers";
//String postbody = "{\"vpc\": {\"name\": \"vpc\", \"cidr\": \"192.168.0.0/16\"}}";
//post(ak, sk, postUrl, postbody);

//TODO: When querying a VPC, replace {project_id} in url with the actual value.
//String url = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//get(ak, sk, url);

//TODO: When updating a VPC, replace {project_id} and {vpc_id} in putUrl with the actual values.
//String putUrl = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//String putbody = "{\"vpc\": {\"name\": \"vpc1\", \"cidr\": \"192.168.0.0/16\"}}";
//put(ak, sk, putUrl, putbody);

//TODO: When deleting a VPC, replace {project_id} and {vpc_id} in deleteUrl with the actual values.
//String deleteUrl = "https://serviceEndpoint/v1/{project_id}/vpcs/{vpc_id}";
//delete(ak, sk, deleteUrl);
}
```

2. Compile the code and call the API.

In the **Package Explorer** area on the left, right-click **Demo.java**, choose **Run AS > Java Application** from the shortcut menu to run the demo code.

You can view the API call logs on the console.

----End

## 3.3 Response

### Status Code

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

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

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

### Response Header

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

**Figure 3-5** shows the response header for the API used to obtain a user token. The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.



**Figure 3-5** Header fields of the response to the request for obtaining a user token

```

connection → keep-alive

content-type → application/json

date → Tue, 12 Feb 2019 06:52:13 GMT

server → Web Server

strict-transport-security → max-age=31536000; includeSubdomains;

transfer-encoding → chunked

via → proxy A

x-content-type-options → nosniff

x-download-options → noopen

x-frame-options → SAMEORIGIN

x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5

x-subject-token
→ MIIYXQYJKoZIhvcNAQcCoIIYtjCCGEoCAQExDTALBgIghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIWmHsidG9rZW4iOOnsiZXhwaXJlc19hdCI6IjwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOKqjACgkqOjE=HUGSjgq112002oobH+Hqpc_Cu0dP4uW0YyiejcAgz/VeFYtLWT1GS00zxKZmlQHqj82HBqHdgIZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FruooL6jggIFKNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECknoH3HRozv0vN--n5d6Nbxg==

x-xss-protection → 1; mode=block;

```

## Response Body

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

The following is part of the response body for the API used to obtain a user token.

```

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

```

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

```

{
  "error": {
    "code": "111400060",
    "message": "instance name exists."
  }
}

```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 4 APIs V2 (Recommended)

---

## 4.1 Lifecycle Management

### 4.1.1 Creating a DCS Instance

#### Function

This API is used to create a DCS instance which is billed in pay-per-use mode.

#### URI

POST /v2/{project\_id}/instances

**Table 4-1** Path Parameters

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

## Request Parameters

**Table 4-2** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	<p>Instance name.</p> <p>An instance name can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter or digit.</p> <p>When you create only one instance at a time, the value of this parameter can contain 4 to 64 characters. When you create multiple instances at a time, the value of this parameter can contain 4 to 56 characters. The instances are named in the format of <i>custom name-n</i>, where <i>n</i> starts from 000 and is incremented by 1. For example, if you create two instances and set the custom name to <b>dc_demo</b>, the two instances are respectively named <b>dc_demo-000</b> and <b>dc_demo-001</b>.</p>
engine	Yes	String	Cache engine: Redis.
engine_version	No	String	<p>Cache version.</p> <p>If the cache engine is Redis, this parameter is mandatory. The version can be 3.0/4.0/5.0/6.0.</p>

Parameter	Mandatory	Type	Description
capacity	Yes	Float	<p>Cache capacity (GB).</p> <ul style="list-style-type: none"> <li>For a single-node or master/standby DCS Redis 3.0 instance, the value can be <b>2, 4, 8, 16, 32, or 64</b>. For a Proxy Cluster DCS Redis instance, the value can be <b>64, 128, 256, 512, or 1024</b>.</li> <li>For a single-node or master/standby DCS Redis 4.0/5.0/6.0 instance, the value can be <b>0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 32, or 64</b>. For a cluster instance, the value can be <b>4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024</b>.</li> </ul>
spec_code	Yes	String	<p>Product flavor. The query method is as follows:</p> <ul style="list-style-type: none"> <li>Method 1: Log in to the DCS console, go to the instance creation page, and check the instance flavor.</li> <li>Method 2: Call the <a href="#">API used to query product flavors</a>.</li> </ul>
az_codes	Yes	Array of strings	<p>Code of the AZ where the cache node resides and which has available resources. For details, see <a href="#">Querying AZs</a>. Check whether the desired AZ has available resources.</p> <p>Master/Standby, Proxy Cluster, and Redis Cluster DCS instances support cross-AZ deployment. You can specify an AZ for the standby node. When specifying AZs for nodes, use commas (,) to separate multiple AZs. For details, see the example request.</p>

Parameter	Mandatory	Type	Description
vpc_id	Yes	String	VPC ID. To obtain it, do as follows: <ul style="list-style-type: none"> <li>Method 1: Log in to the VPC console and view the VPC ID on the <b>My VPCs</b> page.</li> <li>Method 2: Call the VPC API. For details, see the API for querying VPCs.</li> </ul>
subnet_id	Yes	String	Network ID of the subnet. To obtain it, do as follows: <ul style="list-style-type: none"> <li>Method 1: Log in to VPC console and click the target subnet on the <b>Subnets</b> tab page. You can view the network ID on the displayed page.</li> <li>Method 2: Call the VPC API. For details, see the API for querying subnets.</li> </ul>
security_group_id	No	String	Security group to which the instance belongs. This parameter is optional when the engine is Redis and the version is 4.0 or later. This parameter is mandatory when the engine is Redis and the version is 3.0. DCS Redis 4.0 and later instances do not support security groups but whitelists. You can obtain it in either of the following ways: <ul style="list-style-type: none"> <li>Method 1: Log in to the VPC console and view the security group ID on the security group details page.</li> <li>Method 2: Call the API used to query security group details. For details, see the API for querying security group details.</li> </ul>

Parameter	Mandatory	Type	Description
publicip_id	No	String	ID of the EIP bound to the DCS Redis instance. This parameter is reserved. Retain the default value. Default: <b>false</b>
description	No	String	Instance description. The description can contain a maximum of 1024 characters. <b>NOTE</b> The backslash ( ) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character ( ) before the characters, for example, \\ and \".
enable_ssl	No	Boolean	This parameter is reserved. Retain the default value.
private_ip	No	String	IP address that is specified for a DCS instance.
instance_num	No	Integer	Number of instances to be created in batches. This parameter is available for DCS Redis instances. Default value: <b>1</b> . Value range: 1 to 100 Default: <b>1</b>

Parameter	Mandatory	Type	Description
maintain_begin	No	String	<p>UTC time when the maintenance time window starts. The format is HH:mm:ss.</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see <a href="#">Listing Maintenance Time Windows</a>.</li> <li>For example, the start time must be on the hour, such as 18:00:00 and 19:00:00.</li> <li>The start time and end time must be set in pairs. If the start time is left blank, the end time must also be left blank. In this case, the system automatically sets the start time to 18:00:00.</li> </ul>
maintain_end	No	String	<p>UTC time when the maintenance time window ends. The format is HH:mm:ss.</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see <a href="#">Listing Maintenance Time Windows</a>.</li> <li>The end time is one hour later than the start time. For example, if the start time is 18:00:00, the end time is 19:00:00.</li> <li>The start time and end time must be set in pairs. If the end time is left blank, the start time is also left blank. In this case, the system automatically sets the end time to 19:00:00.</li> </ul>

Parameter	Mandatory	Type	Description
password	No	String	<p>Password of a DCS instance.</p> <p><b>NOTE</b> When <b>no_password_access</b> is set to <b>false</b> or not specified, the request must contain the <b>password</b> parameter. The password of a DCS Redis instance must meet the following complexity requirements:</p> <ul style="list-style-type: none"> <li>• Can contain 8 to 64 characters.</li> <li>• The new password must be different from the old password.</li> <li>• Must contain at least three of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters `~!@#\$%^&amp;*()-_+=\ {}&lt;,.&gt;/?</li> </ul> </li> </ul>
no_password_access	No	Boolean	<p>Whether the instance can be accessed without a password.</p> <ul style="list-style-type: none"> <li>• <b>true</b>: The instance can be accessed without a password.</li> <li>• <b>false</b>: The instance can be accessed only after password authentication. If this parameter is not set, the default value <b>false</b> is used.</li> </ul> <p>Default: <b>false</b></p>
bss_param	No	<b>BssParam</b> object	<p>Parameter related to the billing mode. If this parameter is left blank, the default billing mode is pay-per-use. Other billing modes are not supported.</p>
instance_backup_policy	No	<b>BackupPolicy</b> object	<p>Backup policy. This parameter is supported when the instance type is master/standby or cluster.</p>



Parameter	Mandatory	Type	Description
tags	No	Array of <b>ResourceTag</b> objects	Instance tag key and value.
access_user	No	String	Leave this parameter empty.
enable_publicip	No	Boolean	This parameter is reserved. Retain the default value. Default: <b>false</b>
port	No	Integer	Port customization. This parameter is supported only by Redis 4.0 and later instances and not by Redis 3.0 and Memcached instances. If this parameter is not sent or is left empty when you create a Redis 4.0 or later instance, the default port 6379 will be used. To customize a port, specify a port number in the range from 1 to 65535. For a DCS Redis 3.0 instance, the port cannot be customized. Port 6379 will be used.
rename_commands	No	Object	Critical commands can be renamed. If this parameter is not sent or is left empty when you create a Redis 4.0 or later instance, no critical command will be renamed. Currently, only <b>COMMAND, KEYS, FLUSHDB, FLUSHALL, SCAN, HSCAN, SSCAN, ZSCAN,</b> and <b>HGETALL</b> commands can be renamed. Redis 3.0 instances do not support renaming of high-risk commands.
template_id	No	String	Parameter template ID. The default template is used when no ID is specified.

**Table 4-3** BssParam

Parameter	Mandatory	Type	Description
is_auto_renew	No	String	This parameter is currently not used. Default: <b>false</b>
charging_mode	Yes	String	Billing mode. The default value is <b>postPaid</b> , indicating pay-per-use. Default: <b>postPaid</b>
is_auto_pay	No	String	This parameter is currently not used.
period_type	No	String	This parameter is currently not used.
period_num	No	Integer	This parameter is currently not used.

**Table 4-4** BackupPolicy

Parameter	Mandatory	Type	Description
backup_type	Yes	String	Backup type. <ul style="list-style-type: none"> <li>• <b>auto</b>: automatic backup</li> <li>• <b>manual</b>: manual backup</li> </ul>
save_days	No	Integer	This parameter is mandatory when <b>backup_type</b> is set to <b>auto</b> . Retention period, in days. The value ranges from 1 to 7.
periodical_backup_plan	No	<a href="#">BackupPlan</a> object	Backup schedule. This parameter is mandatory when <b>backup_type</b> is set to <b>auto</b> .

**Table 4-5** BackupPlan

Parameter	Mandatory	Type	Description
timezone_offset	No	String	Time zone in which backup is performed. Range: GMT - 12:00 to GMT +12:00. If this parameter is left blank, the current time zone of the DCS-Server VM is used by default.

Parameter	Mandatory	Type	Description
backup_at	Yes	Array of integers	Day in a week on which backup starts. The value ranges from <b>1</b> to <b>7</b> , where <b>1</b> indicates Monday, and <b>7</b> indicates Sunday.
period_type	Yes	String	Interval at which backup is performed, which supports only <b>weekly</b> currently.
begin_at	Yes	String	Time at which backup starts. <b>00:00-01:00</b> indicates that the backup starts at 00:00. The value must be on the hour. The backup interval is 1 hour.

**Table 4-6** ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. <ul style="list-style-type: none"> <li>• Must be specified.</li> <li>• Must be unique for each resource.</li> <li>• Can contain a maximum of 36 characters.</li> <li>• Must be unique and cannot be empty.</li> </ul>
value	No	String	Tag value. <ul style="list-style-type: none"> <li>• This parameter is mandatory when <b>action</b> is set to <b>create</b> and is optional when <b>action</b> is set to <b>delete</b>.</li> <li>• It can contain a maximum of 43 characters.</li> </ul>

## Response Parameters

Status code: 200

**Table 4-7** Response body parameters

Parameter	Type	Description
instances	Array of <a href="#">Instances</a> objects	DCS instance ID and name. If multiple DCS instances are created at a time, multiple DCS instance IDs and names will be returned.

**Table 4-8** Instances

Parameter	Type	Description
instance_id	String	DCS instance ID.
instance_name	String	DCS instance name.

**Status code: 400**

**Table 4-9** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 401**

**Table 4-10** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 403**

**Table 4-11** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 404**

**Table 4-12** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 500**

**Table 4-13** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

## Example Requests

- Creating a DCS Redis instance

POST [https://{dcs\\_endpoint}/v2/{project\\_id}/instances](https://{dcs_endpoint}/v2/{project_id}/instances)

```
{
  "name": "dcs-APItest",
  "description": "Test",
  "engine": "Redis",
  "engine_version": "5.0",
  "vpc_id": "5e37b3be-950a-48e1-b498-65b63d336481",
  "enable_ssl": false,
  "private_ip": "",
  "az_codes": [ "region01" ],
  "capacity": 1,
  "access_user": "",
  "password": "*****",
  "enable_publicip": false,
  "spec_code": "redis.single.xu1.large.1",
  "subnet_id": "a4112635-3ec0-471c-95c3-5cf49b9533af",
  "no_password_access": false,
  "template_id": "b3ecc9c7-1133-4c47-a06a-21366e227d61"
}
```

- Creating a pay-per-use, master/standby DCS Redis instance with a customized port, renamed commands, and cross-AZ deployment

```
{
  "vpc_id": "c5cd009b-9ba9-41f2-9a26-2b8c3f3ffd39",
  "description": "Test",
  "port": 4040,
  "enable_ssl": false,
  "private_ip": "",
  "az_codes": [ "region01", "region02" ],
  "capacity": 2,
  "access_user": "",
  "instance_num": 1,
  "password": "*****",
  "enable_publicip": false,
  "engine": "Redis",
  "spec_code": "redis.ha.au1.large.2",
  "name": "dcs-demo",
  "subnet_id": "7e95c4d6-d7af-424c-a3cf-2be10968fe81",
  "engine_version": "4.0",
  "no_password_access": false,
  "rename_commands": {
    "keys": "keys001",
    "flushdb": "flushdb001",
    "flushall": "flushall001"
  }
}
```

```
}  
}
```

## Example Responses

### Status code: 200

The DCS instance creation task is submitted successfully.

#### NOTE

If the instance status is **RUNNING**, the DCS instance has been successfully created.

- Example 1

```
{  
  "instances": [ {  
    "instance_id": "3c49fd6b-fc7c-419e-9644-b6cce008653f",  
    "instance_name": "dcs-test005"  
  } ]  
}
```

- Example 2

```
{  
  "instances": [ {  
    "instance_id": "77284d69-cd51-4bf1-aa30-2e60f055800c",  
    "instance_name": "dcs-APItest1"  
  } ]  
}
```

### Status code: 400

Invalid request.

```
{  
  "error_code": "DCS.1004",  
  "error_msg": "Project ID does not match the token."  
}
```

### Status code: 401

Invalid authentication information.

```
{  
  "error_code": "DCS.1001",  
  "error_msg": "Invalid token."  
}
```

### Status code: 403

The request is rejected.

```
{  
  "error_code": "DCS.2003",  
  "error_msg": "This role does not have the permission to perform this operation."  
}
```

### Status code: 404

The requested resource is not found.

```
{  
  "error_code": "DCS.4001",  
  "error_msg": "The requested URL does not exist."  
}
```

### Status code: 500

Internal service error.

```
{  
  "error_code" : "DCS.5000",  
  "error_msg" : "Internal service error."  
}
```

## Status Codes

Status Code	Description
200	The DCS instance creation task is submitted successfully. <b>NOTE</b> If the instance status is <b>RUNNING</b> , the DCS instance has been successfully created.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

### 4.1.2 Querying All DCS Instances

#### Function

This API is used to query DCS instances of a tenant, and allows you to specify query criteria.

#### URI

GET /v2/{project\_id}/instances

**Table 4-14** Path Parameters

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



**Table 4-15** Query Parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	Instance ID.
include_failures	No	String	Whether to return the number of instances that fail to be created. If the value is <b>true</b> , the number of instances that failed to be created is returned. If the value is not <b>true</b> , the number is not returned.
include_delete	No	String	Whether to return the number of instances that have been deleted. If the value is <b>true</b> , the number of instances that have been deleted is returned. If the value is not <b>true</b> , the number is not returned.
name	No	String	Instance name.
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 displayed on each page. The minimum value is <b>1</b> . The maximum value is <b>1000</b> . If this parameter is not specified, 10 records are displayed on each page by default.
status	No	String	Instance status. For details, see <a href="#">DCS Instance Statuses</a> .
name_equal	No	String	Whether to search for the instance that precisely matches a specified instance name.  The default value is <i>false</i> , indicating that a fuzzy search is performed based on a specified instance name. If the value is <b>true</b> , the instance that precisely matches a specified instance name is queried.

Parameter	Mandatory	Type	Description
tags	No	String	The query is based on the instance tag key and value. <i>{key}</i> indicates the tag key, and <i>{value}</i> indicates the tag value.  To query instances with multiple tag keys and values, separate key-value pairs with commas (,).
ip	No	String	IP address for connecting to the DCS instance.
capacity	No	String	DCS instance cache capacity in GB.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-16** Response body parameters

Parameter	Type	Description
instance_num	Integer	Number of instances.
instances	Array of <a href="#">InstanceListInfo</a> objects	Instance details array.

**Table 4-17** InstanceListInfo

Parameter	Type	Description
publicip_id	String	ID of the EIP bound to the DCS Redis instance. This parameter is reserved. The value is <b>null</b> .
vpc_name	String	VPC name.
charging_mode	Integer	Billing mode. The value can be <b>0</b> : pay-per-use.
vpc_id	String	VPC ID.
subnet_id	String	Subnet ID.

Parameter	Type	Description
security_group_id	String	Security group ID.
created_at	String	Creation time. Format: 2017-03-31T12:24:46.297Z
updated_at	String	Update time. Format: 2017-03-31T19:24:46.297Z.
enable_ssl	Boolean	This parameter is reserved.
max_memory	Integer	Total memory size in MB.
used_memory	Integer	Used memory size in MB.
public_ip_address	String	EIP bound to the DCS Redis instance. This parameter is reserved. The value is <b>null</b> .
capacity	Integer	Cache capacity (GB)
capacity_minor	String	Capacity (GB) of a small DCS instance (smaller than 1 GB).
order_id	String	Order ID. The value is null when a pay-per-use instance is created.
maintain_begin	String	UTC time when the maintenance time window starts. The format is HH:mm:ss.
maintain_end	String	UTC time when the maintenance time window ends. The format is HH:mm:ss.
engine	String	Cache engine.
engine_version	String	Cache version.
service_upgrade	Boolean	Whether the instance has an upgrade task. <ul style="list-style-type: none"> <li>● <b>true</b>: yes</li> <li>● <b>false</b>: no</li> </ul>
no_password_access	String	Indicates whether the instance can be accessed without a password. <ul style="list-style-type: none"> <li>● <b>true</b>: The instance can be accessed without a password.</li> <li>● <b>false</b>: The instance can be accessed only after password authentication.</li> </ul>

Parameter	Type	Description
service_task_id	String	Upgrade task ID. <ul style="list-style-type: none"> <li>If the value of <b>service_upgrade</b> is set to <b>true</b>, the value of this parameter is the ID of the upgrade task.</li> <li>If the value of <b>service_upgrade</b> is set to <b>false</b>, the value of this parameter is empty.</li> </ul>
ip	String	IP address for connecting to the DCS instance. For a cluster instance, multiple IP addresses are returned and separated by commas (,). For example, 192.168.0.1,192.168.0.2.
access_user	String	Username used for accessing a DCS instance after password authentication.
instance_id	String	Instance ID.
enable_publicip	Boolean	This parameter is reserved.
port	Integer	Port of the DCS instance.
user_id	String	User ID.
user_name	String	Username.
domain_name	String	Domain name of the instance.
readonly_domain_name	String	Read-only domain name of the instance. This parameter is available only for master/standby instances.
name	String	Instance name.
spec_code	String	Product flavor.
status	String	Instance status. For details, see <a href="#">DCS Instance Statures</a> .
tags	Array of <a href="#">ResourceTag</a> objects	Instance tag key and value.
description	String	Description about the instance.
cpu_type	String	CPU type of the instance. Generally, the value is <b>x86_64</b> or <b>aarch64</b> .
az_codes	Array of strings	AZs where there are available resources.
features	<a href="#">Features</a> object	Features supported by the instance.
sub_status	String	Instance sub-status.

**Table 4-18** ResourceTag

Parameter	Type	Description
key	String	Tag key. <ul style="list-style-type: none"> <li>• Must be specified.</li> <li>• Must be unique for each resource.</li> <li>• Can contain a maximum of 36 characters.</li> <li>• Must be unique and cannot be empty.</li> </ul>
value	String	Tag value. <ul style="list-style-type: none"> <li>• This parameter is mandatory when <b>action</b> is set to <b>create</b> and is optional when <b>action</b> is set to <b>delete</b>.</li> <li>• It can contain a maximum of 43 characters.</li> </ul>

**Table 4-19** Features

Parameter	Type	Description
support_acl	Boolean	Whether ACL is supported. <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>
support_transparent_client_ip	Boolean	Whether client IP pass-through is enabled. <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>
support_ssl	Boolean	Whether SSL is supported. <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>
support_audit_log	Boolean	Whether audit logs are supported <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>

**Status code: 400**

**Table 4-20** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-21** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-22** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-23** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-24** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances?
offset=0&limit=10&name={name}&status={status}&id={id}&include_failure=true&include_delete=true&name
_equal=false
```

## Example Responses

**Status code: 400**

Invalid request.

```
{
  "error_code" : "DCS.4800",
  "error_msg" : "Invalid offset in the request."
}
```

## Status Codes

Status Code	Description
200	All instances are listed successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

### 4.1.3 Batch Deleting DCS Instances

#### Function

This API is used to delete multiple DCS instances at a time.

#### URI

DELETE /v2/{project\_id}/instances

**Table 4-25** Path Parameters

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



**Table 4-26** Query Parameters

Parameter	Mandatory	Type	Description
all_failure	No	Boolean	Whether to delete all DCS instances that failed to be created. Values: <ul style="list-style-type: none"> <li>• <b>true</b>: all instances that fail to be created are deleted. In this case, the <b>instances</b> parameter in the request can be empty.</li> <li>• <b>false</b> or other values: The DCS instances specified by the <b>instances</b> parameter will be deleted.</li> </ul>

## Request Parameters

**Table 4-27** Request body parameters

Parameter	Mandatory	Type	Description
instances	No	Array of strings	List of instance IDs. This parameter is set only when the <b>all_failure</b> parameter in the URI is set to <b>false</b> or another value.

## Response Parameters

Status code: 200

**Table 4-28** Response body parameters

Parameter	Type	Description
results	Array of <b>BatchOpsResult</b> objects	Result of deleting, restarting, or clearing data of an instance.

**Table 4-29** BatchOpsResult

Parameter	Type	Description
result	String	Instance deletion result. Options: <b>success</b> and <b>failed</b> .

Parameter	Type	Description
instance	String	DCS instance ID.

**Status code: 500**

**Table 4-30** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 400**

**Table 4-31** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Batch deleting DCS instances

```
DELETE https://{dcs_endpoint}/v2/{project_id}/instances?all_failure={all_failure}
```

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

## Example Responses

**Status code: 200**

DCS instances deleted successfully.

```
{
  "results": [ {
    "result": "success",
    "instance": "54602a9d-5e22-4239-9123-77e350df4a34"
  }, {
    "result": "success",
    "instance": "7166cdea-dbad-4d79-9610-7163e6f8b640"
  } ]
}
```

## Status Codes

Status Code	Description
200	DCS instances deleted successfully.
500	Internal service error.
400	Invalid request.

## Error Codes

See [Error Codes](#).

## 4.1.4 Querying a DCS instance

### Function

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

### URI

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

**Table 4-32** Path Parameters

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

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 4-33** Response body parameters

Parameter	Type	Description
vpc_name	String	VPC name.
charging_mode	Integer	Billing mode. The value can be <b>0</b> : pay-per-use.
vpc_id	String	VPC ID.
user_name	String	Username.
created_at	String	Time when the instance is created. Format: 2017-03-31T12:24:46.297Z
description	String	Instance description
security_group_id	String	Security group ID.
security_group_name	String	Security group name.
max_memory	Integer	Total memory size in MB.
used_memory	Integer	Used memory size in MB.
capacity	Integer	DCS instance cache capacity in GB.
capacity_minor	String	Capacity (GB) of a small DCS instance (smaller than 1 GB).
maintain_begin	String	UTC time when the maintenance time window starts. The format is HH:mm:ss.
maintain_end	String	UTC time when the maintenance time window ends. The format is HH:mm:ss.
engine	String	DCS instance engine.
no_password_access	String	Indicates whether the instance can be accessed without a password. <ul style="list-style-type: none"> <li>● <b>true</b>: The instance can be accessed without a password.</li> <li>● <b>false</b>: The instance can be accessed only after password authentication.</li> </ul>
ip	String	IP address for connecting to the DCS instance. For a cluster instance, multiple IP addresses are returned and separated by commas (,). For example, 192.168.0.1,192.168.0.2.
instance_backup_policy	<a href="#">InstanceBackupPolicy</a> object	Backup policy. This parameter is supported when the instance type is master/standby or cluster.

Parameter	Type	Description
az_codes	Array of strings	AZ where the instance is in. The AZ code is returned.
available_zones	Array of strings	ID of the AZ where the instance is in. The AZ ID is returned.
access_user	String	Username used for accessing a DCS instance after password authentication.
instance_id	String	Instance ID.
port	Integer	Port of the DCS instance.
user_id	String	User ID.
name	String	Instance name.
spec_code	String	Specification code.
subnet_id	String	Subnet ID.
subnet_name	String	Subnet name.
subnet_cidr	String	Subnet CIDR block.
engine_version	String	Cache version.
order_id	String	Order ID.
status	String	Instance status. For details, see <a href="#">DCS Instance Statuses</a> .
domain_name	String	Domain name of the instance.
readonly_domain_name	String	Read-only domain name of the instance. This parameter is available only for master/standby instances.
enable_publicip	Boolean	This parameter is reserved.
publicip_id	String	ID of the EIP bound to the DCS Redis instance. This parameter is reserved. The value is <b>null</b> .
publicip_address	String	EIP bound to the DCS Redis instance. This parameter is reserved. The value is <b>null</b> .
enable_ssl	Boolean	This parameter is reserved.
service_upgrade	Boolean	Whether the instance has an upgrade task. <ul style="list-style-type: none"> <li>• <b>true</b>: yes</li> <li>• <b>false</b>: no</li> </ul>

Parameter	Type	Description
service_task_id	String	Upgrade task ID. <ul style="list-style-type: none"> <li>If the value of <b>service_upgrade</b> is set to <b>true</b>, the value of this parameter is the ID of the upgrade task.</li> <li>If the value of <b>service_upgrade</b> is set to <b>false</b>, the value of this parameter is empty.</li> </ul>
backend_addresses	String	Backend address of a cluster instance.
features	<b>Features</b> object	Features supported by the instance.
domain_name_info	<b>DomainNameInfo</b> object	Information about instance domain name update and public domain name resolution.
transparent_client_ip_enable	Boolean	Whether client IP pass-through is enabled.
sub_status	String	Instance sub-status.
tags	Array of <b>ResourceTag</b> objects	Instance tag key and value.
cpu_type	String	CPU type of the instance. Generally, the value is <b>x86_64</b> or <b>aarch64</b> .
update_at	String	Update time, for example, 2022-07-06T09:32:16.502Z.
product_type	String	Edition. Only the basic edition is supported. Value: <b>generic</b> . Enumeration values: <ul style="list-style-type: none"> <li><b>generic</b></li> <li><b>enterprise</b></li> </ul>
storage_type	String	Storage type (DRAM). Enumeration values: <ul style="list-style-type: none"> <li><b>DRAM</b></li> </ul>
launched_at	String	Start time, for example, 2022-07-06T09:32:16.502Z.
cache_mode	String	Instance type. Options: <ul style="list-style-type: none"> <li><b>single</b>: single-node</li> <li><b>ha</b>: master/standby</li> <li><b>cluster</b>: Redis Cluster</li> <li><b>proxy</b>: Proxy Cluster</li> </ul>

Parameter	Type	Description
support_slow_log_flag	String	Whether slow query logs are supported.
db_number	Integer	Number of databases.
replica_count	Integer	Number of replicas.
sharding_count	Integer	Number of shards in a cluster instance.
bandwidth_info	<b>BandwidthInfo</b> object	Bandwidth information.
cloud_service_type_code	String	Code of the cloud service type.
cloud_resource_type_code	String	Code of the cloud resource type.
inquiry_spec_code	String	Specification code in the operations system.

**Table 4-34** InstanceBackupPolicy

Parameter	Type	Description
backup_policy_id	String	Backup policy ID.
created_at	String	Creation time. Example: 2022-04-11T09:45:24.790Z
updated_at	String	Update time. Example: 2022-04-12T02:22:03.269Z
policy	<b>BackupPolicy</b> object	Backup policy.
tenant_id	String	Tenant ID.

**Table 4-35** BackupPolicy

Parameter	Type	Description
backup_type	String	Backup type. <ul style="list-style-type: none"> <li>● <b>auto</b>: automatic backup</li> <li>● <b>manual</b>: manual backup</li> </ul>

Parameter	Type	Description
save_days	Integer	This parameter is mandatory when <b>backup_type</b> is set to <b>manual</b> . Retention period, in days. The value ranges from 1 to 7. The automatic backup policy is retained when automatic backup is switched to manual backup.
periodical_backup_plan	<b>BackupPlan</b> object	Backup schedule. This parameter is mandatory when <b>backup_type</b> is set to <b>manual</b> . The automatic backup policy is retained when automatic backup is switched to manual backup.

**Table 4-36** BackupPlan

Parameter	Type	Description
timezone_offset	String	Time zone in which backup is performed. This parameter is no longer used.
backup_at	Array of integers	Day in a week on which backup starts. The value ranges from 1 to 7, where 1 indicates Monday, and 7 indicates Sunday. The automatic backup policy is retained when automatic backup is switched to manual backup.
period_type	String	Interval at which backup is performed, which supports only <b>weekly</b> currently. The automatic backup policy is retained when automatic backup is switched to manual backup.
begin_at	String	UTC time when the backup starts. For example, <b>00:00-01:00</b> indicates that the backup starts at 00:00 (UTC time). The value must be on the hour. The backup interval is 1 hour. The automatic backup policy is retained when automatic backup is switched to manual backup.

**Table 4-37** Features

Parameter	Type	Description
support_acl	Boolean	Whether ACL is supported. <ul style="list-style-type: none"> <li>• <b>true</b>: Yes</li> <li>• <b>false</b>: No</li> </ul>



Parameter	Type	Description
support_transparent_client_ip	Boolean	Whether client IP pass-through is enabled. <ul style="list-style-type: none"> <li>● <b>true</b>: Yes</li> <li>● <b>false</b>: No</li> </ul>
support_ssl	Boolean	Whether SSL is supported. <ul style="list-style-type: none"> <li>● <b>true</b>: Yes</li> <li>● <b>false</b>: No</li> </ul>
support_audit_log	Boolean	Whether audit logs are supported <ul style="list-style-type: none"> <li>● <b>true</b>: Yes</li> <li>● <b>false</b>: No</li> </ul>

**Table 4-38** DomainNameInfo

Parameter	Type	Description
support_public_resolve	Boolean	Whether to enable public domain name resolution. <ul style="list-style-type: none"> <li>● <b>true</b>: enable</li> <li>● <b>false</b>: disable</li> </ul>
is_latest_rules	Boolean	Whether the current domain name is the latest. <ul style="list-style-type: none"> <li>● <b>true</b>: yes</li> <li>● <b>false</b>: no</li> </ul>
zone_name	String	Region suffix of the domain name.
history_domain_names	Array of <a href="#">DomainNameEntity</a> objects	Historical domain name information.

**Table 4-39** DomainNameEntity

Parameter	Type	Description
domain_name	String	Historical domain names of the instance.
is_readonly	Boolean	Whether the domain name is read-only. <ul style="list-style-type: none"> <li>● <b>true</b>: Yes</li> <li>● <b>false</b>: No</li> </ul>

**Table 4-40** ResourceTag

Parameter	Type	Description
key	String	Tag key. <ul style="list-style-type: none"> <li>• Must be specified.</li> <li>• Must be unique for each resource.</li> <li>• Can contain a maximum of 36 characters.</li> <li>• Must be unique and cannot be empty.</li> </ul>
value	String	Tag value. <ul style="list-style-type: none"> <li>• This parameter is mandatory when <b>action</b> is set to <b>create</b> and is optional when <b>action</b> is set to <b>delete</b>.</li> <li>• It can contain a maximum of 43 characters.</li> </ul>

**Table 4-41** BandwidthInfo

Parameter	Type	Description
begin_time	Long	Start time of temporary increase.
end_time	Long	End time of temporary increase.
current_time	Long	Current time.
bandwidth	Integer	Current bandwidth, in Mbit/s.
next_expand_time	Long	Next increase time.
expand_count	Integer	Number of increases.
expand_effect_time	Long	Interval between temporary increases.
expand_interval_time	Long	Time to the next increase.
max_expand_count	Integer	Maximum number of increases.
task_running	Boolean	Whether the task is running.

## Example Requests

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

## Example Responses

**Status code: 200**

The specified instance is queried successfully.

```
{
  "publicip_id" : null,
  "vpc_name" : "dcs-beta",
  "charging_mode" : 0,
  "vpc_id" : "5e37b3be-950a-48e1-b498-65b63d336481",
  "user_name" : "clouduser",
  "created_at" : "2022-08-29T08:53:47.319Z",
  "description" : null,
  "cache_mode" : "ha",
  "security_group_id" : "securityGroupId",
  "enable_ssl" : false,
  "max_memory" : 128,
  "publicip_address" : null,
  "capacity" : 0,
  "maintain_begin" : "18:00:00",
  "engine" : "Redis",
  "maintain_end" : "19:00:00",
  "capacity_minor" : ".125",
  "service_upgrade" : false,
  "subnet_name" : "dcs-beta",
  "no_password_access" : "true",
  "service_task_id" : null,
  "ip" : "192.168.0.251",
  "subnet_cidr" : "192.168.0.0/24",
  "used_memory" : 2,
  "security_group_name" : "securityGroupId",
  "instance_backup_policy" : null,
  "az_codes" : [ "xx-xxxx-xx" ],
  "available_zones" : [ "d539378ec1314c85b76fef3f7071458" ],
  "access_user" : null,
  "instance_id" : "a4c545cd-10b2-4efc-b0ab-a9b554ca0621",
  "enable_publicip" : false,
  "port" : 6379,
  "user_id" : "d53977d1adfb49c5b025ba7d33a13fd7",
  "domain_name" : "redis-a4c545cd-10b2-4efc-b0ab-a9b554ca0621.dcs.example.com",
  "name" : "dcs-billing",
  "spec_code" : "redis.ha.xu1.tiny.r2.128",
  "subnet_id" : "a4112635-3ec0-471c-95c3-5cf49b9533af",
  "engine_version" : "5.0",
  "order_id" : null,
  "status" : "RUNNING",
  "features" : {
    "support_acl" : true,
    "support_transparent_client_ip" : true,
    "support_ssl" : false,
    "support_audit_log" : false
  },
  "domain_name_info" : {
    "support_public_resolve" : true,
    "is_latest_rules" : true,
    "zone_name" : "dcs.example.com",
    "history_domain_names" : null
  },
  "transparent_client_ip_enable" : true,
  "sub_status" : "normal",
  "cpu_type" : "x86_64",
  "cloud_service_type_code" : "hws.service.type.dcs",
  "cloud_resource_type_code" : "hws.resource.type.dcs3",
  "inquiry_spec_code" : "redis.ha.xu1.tiny.r2.128"
}
```

## Status Codes

Status Code	Description
200	The specified instance is queried successfully.

Status Code	Description
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.1.5 Deleting an Instance

### Function

This API is used to delete a specified DCS instance to free up all resources occupied by it.

 **NOTE**

To delete pay-per-use resources, perform operations in this section..

### URI

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

**Table 4-42** Path Parameters

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

### Request Parameters

None

### Response Parameters

None

### Example Requests

Deleting a specified instance

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

## Example Responses

None

## Status Codes

Status Code	Description
204	Instance deleted successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.1.6 Modifying Details of a DCS Instance

### Function

This API is used to modify the information about a DCS instance, including the instance name, description, port, backup policy, start and end time of the maintenance window, and security group.

### URI

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

**Table 4-43** Path Parameters

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

## Request Parameters

**Table 4-44** Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	<p>Instance name.</p> <p>An instance name can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter.</p> <p>When you create only one instance at a time, the value of this parameter can contain 4 to 64 characters. When you create multiple instances at a time, the value of this parameter can contain 4 to 56 characters. The instances are named in the format of <i>custom name-n</i>, where <i>n</i> starts from 000 and is incremented by 1. For example, if you create two instances and set the custom name to <b>dc_demo</b>, the two instances are respectively named <b>dc_demo-000</b> and <b>dc_demo-001</b>.</p>
description	No	String	<p>Instance description. The description can contain a maximum of 1024 characters.</p> <p><b>NOTE</b></p> <p>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 \".</p> <p>Minimum: <b>0</b></p> <p>Maximum: <b>1024</b></p>

Parameter	Mandatory	Type	Description
port	No	Integer	Port for connecting to the Redis instance. The port range is from 1 to 65535. After the port is changed, all connections to the Redis instance are interrupted, and services must connect to the new port. Only DCS Redis instances support port change. Minimum: <b>1</b> Maximum: <b>65535</b>
rename_commands	No	<a href="#">RenameCommandResp</a> object	Command renaming list.
maintain_begin	No	String	.
maintain_end	No	String	UTC time when the maintenance time window ends. The format is HH:mm:ss. <ul style="list-style-type: none"> <li>The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see <a href="#">Listing Maintenance Time Windows</a>.</li> <li>The end time is one hour later than the start time. For example, if the start time is 18:00:00, the end time is 19:00:00.</li> <li>The start time and end time must be set in pairs. If the end time is left blank, the start time must also be left blank.</li> </ul>
security_group_id	No	String	Security group ID. The value can be obtained from the VPC console or the API used to query the security group list. This parameter is supported only by DCS Redis 3.0 instances.

Parameter	Mandatory	Type	Description
instance_backup_policy	No	<a href="#">BackupPolicy</a> object	Backup policy. This parameter is supported when the instance type is master/standby or cluster.

**Table 4-45** RenameCommandResp

Parameter	Mandatory	Type	Description
command	No	String	Command <b>COMMAND</b> .
flushall	No	String	Command <b>FLUSHALL</b> .
flushdb	No	String	Command <b>FLUSHDB</b> .
hgetall	No	String	Command <b>HGETALL</b> .
keys	No	String	Command <b>KEYS</b> .

**Table 4-46** BackupPolicy

Parameter	Mandatory	Type	Description
backup_type	Yes	String	Backup type. <ul style="list-style-type: none"> <li>• <b>auto</b>: automatic backup</li> <li>• <b>manual</b>: manual backup</li> </ul>
save_days	No	Integer	This parameter is mandatory when <b>backup_type</b> is set to <b>manual</b> . Retention period, in days. The value ranges from 1 to 7. The automatic backup policy is retained when automatic backup is switched to manual backup.
periodical_backup_plan	No	<a href="#">BackupPlan</a> object	Backup schedule. This parameter is mandatory when <b>backup_type</b> is set to <b>manual</b> . The automatic backup policy is retained when automatic backup is switched to manual backup.



**Table 4-47 BackupPlan**

Parameter	Mandatory	Type	Description
timezone_offset	No	String	Time zone in which backup is performed. This parameter is no longer used.
backup_at	Yes	Array of integers	Day in a week on which backup starts. The value ranges from <b>1</b> to <b>7</b> , where <b>1</b> indicates Monday, and <b>7</b> indicates Sunday. The automatic backup policy is retained when automatic backup is switched to manual backup.
period_type	Yes	String	Interval at which backup is performed, which supports only <b>weekly</b> currently. The automatic backup policy is retained when automatic backup is switched to manual backup.
begin_at	Yes	String	UTC time when the backup starts. For example, <b>00:00-01:00</b> indicates that the backup starts at 00:00 (UTC time). The value must be on the hour. The backup interval is 1 hour. The automatic backup policy is retained when automatic backup is switched to manual backup.

## Response Parameters

None

## Example Requests

Changing the name of a specified instance to dcs002 and port to 6379, and configuring an auto backup policy

```
PUT https://{dcs_endpoint}/v2/{project_id}/instance/{instance_id}
```

```
{
  "name": "dcs002",
  "description": "instance description",
  "port": 6379,
  "maintain_begin": "18:00:00",
  "maintain_end": "19:00:00",
  "security_group_id": "18e9309f-f81a-4749-bb21-f74576292162",
```

```
"instance_backup_policy" : {
  "backup_type" : "auto",
  "save_days" : "1",
  "periodical_backup_plan" : {
    "backup_at" : [ "1", "2", "3", "4", "6", "7" ],
    "period_type" : "weekly",
    "begin_at" : "00:00-01:00"
  }
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	DCS instance modified successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.1.7 Modifying Instance Specifications

### Function

This API is used to modify specifications of a DCS instance in the **Running** state.

### URI

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

**Table 4-48** Path Parameters

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

## Request Parameters

**Table 4-49** Request body parameters

Parameter	Mandatory	Type	Description
spec_code	Yes	String	Flavor after the modification. The query method is as follows: <ul style="list-style-type: none"> <li>Method 1: Log in to the DCS console, go to the instance creation page, and check the instance flavor.</li> <li>Method 2: Call the <a href="#">API used to query product flavors</a>.</li> </ul>
new_capacity	Yes	Integer	New memory size of the DCS instance, in GB. For a single-node or master/standby DCS Redis 4.0 or later instance, the value can be <b>0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 32, or 64</b> . For a cluster instance, the value can be <b>4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024</b> . Currently, the specifications of a Proxy Cluster DCS Redis 3.0 instance cannot be reduced. In addition to integers, 0.125, 0.25, and 0.5 are also supported.
bss_param	No	<a href="#">BssParamEntity</a> object	This parameter does not need to be set for pay-per-use instances.
reserved_ip	No	Array of strings	IP addresses to retain. Mandatory during cluster scale-in. If this parameter is not set, the system randomly deletes unnecessary shards.

Parameter	Mandatory	Type	Description
change_type	No	String	<p>Modification type. Mandatory when the number of replicas of a DCS Redis 4.0 or 5.0 instance is modified.</p> <ul style="list-style-type: none"> <li>• <b>createReplication</b>: adding replicas</li> <li>• <b>deleteReplication</b>: deleting replicas</li> <li>• <b>addSharding</b>: adding shards</li> <li>• <b>instanceType</b>: changing the instance type..</li> </ul> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>createReplication</b></li> <li>• <b>deleteReplication</b></li> <li>• <b>addSharding</b></li> <li>• <b>instanceType</b></li> </ul>
available_zones	No	Array of strings	<p>Code of the AZ where each replica is in. This parameter is mandatory when you add replicas to a DCS Redis 4.0 or 5.0 instance. Before specifying an AZ, ensure that there are available resources in it. This parameter is mandatory when you delete replicas from a cluster instance.</p> <p>For details, see <a href="#">Querying AZs</a>.</p>
node_list	No	Array of strings	<p>ID of the replica to delete. This parameter is mandatory when you delete replicas of a master/standby or read/write splitting DCS Redis 4.0 or 5.0 instance. Currently, only one replica can be deleted at a time.</p> <p>For details, see <a href="#">Querying Details of Shards and Replicas</a>.</p>

Parameter	Mandatory	Type	Description
execute_immediately	No	Boolean	Whether to apply the change immediately. The default value is <b>true</b> . <ul style="list-style-type: none"> <li>• <b>true</b>: Apply the change immediately.</li> <li>• <b>false</b>: Apply the change during the maintenance window. Currently, specification changes can only be applied immediately..</li> </ul>

**Table 4-50** BssParamEntity

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	This parameter is reserved.

## Response Parameters

None

## Example Requests

Changing instance specifications to 1 GB.

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/resize
```

```
{
  "spec_code": "redis.ha.xu1.tiny.r2.1",
  "new_capacity": 1,
  "reserved_ip": [ "192.168.0.125" ],
  "change_type": "createReplication",
  "available_zones": [ "e7afd64502d64fe3bfb60c2c82ec0ec6", "d90ff6d692954373bf53be49cf3900cb" ],
  "node_list": [ "ff80808282eee5f90183120188ae093e" ],
  "execute_immediately": true
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	DCS instance specifications modified successfully.

## Error Codes

See [Error Codes](#).

# 4.2 Instance Management

## 4.2.1 Master/Standby Switchover

### Function

This API is used to perform a master/standby switchover. Only master/standby instances support this operation.

### URI

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

**Table 4-51** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 400**

**Table 4-52** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-53** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-54** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-55** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-56** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

### Example Requests

```
POST https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-
cebf-4473-95c4-d1b573c16e79/swap
```

### Example Responses

**Status code: 400**

Invalid request.

```
{
  "error_msg": "Master standby swap is not supported.",
  "error_code": "DCS.4855",
  "error_ext_msg": null
}
```

### Status Codes

Status Code	Description
204	Master/standby switchover performed successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

### Error Codes

See [Error Codes](#).



## 4.2.2 Changing the Password

### Function

This API is used to change the password of a DCS instance.

### URI

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

**Table 4-57** Path Parameters

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

### Request Parameters

**Table 4-58** Request body parameters

Parameter	Mandatory	Type	Description
old_password	Yes	String	Old password.
new_password	Yes	String	New password.

### Response Parameters

**Status code: 200**

**Table 4-59** Response body parameters

Parameter	Type	Description
lock_time	String	Lock duration. If the authentication fails and the account is locked, a response is returned and is not <b>null</b> .

Parameter	Type	Description
result	String	Password change result: <ul style="list-style-type: none"> <li>• <b>success</b>: Password is changed successfully.</li> <li>• <b>passwordFailed</b>: Password authentication failed.</li> <li>• <b>locked</b>: The account has been locked.</li> <li>• <b>failed</b>: Password change failed.</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>success</b></li> <li>• <b>passwordFailed</b></li> <li>• <b>locked</b></li> <li>• <b>failed</b></li> </ul>
lock_time_left	String	Remaining time before the account is unlocked. When the account is locked, a response is returned and is not <b>null</b> .
retry_times_left	String	Number of remaining password attempts. If the authentication fails, a response is returned and is not <b>null</b> .
message	String	Modification result description.

**Status code: 400**

**Table 4-60** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-61** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Changing the password of the DCS instance by entering the old and new passwords

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/password
{
  "old_password": "XXXXXX",
  "new_password": "XXXXXX"
}
```

## Example Responses

**Status code: 200**

Password is changed successfully.

```
{
  "lock_time": "0",
  "result": "success",
  "lock_time_left": "0",
  "retry_times_left": "5",
  "message": "Modify DCSInstance password success."
}
```

## Status Codes

Status Code	Description
200	Password is changed successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.2.3 Resetting a Password

### Function

This API is used to reset the password of a DCS instance.

### URI

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

**Table 4-62** Path Parameters

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

### Request Parameters

**Table 4-63** Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	New password.
no_password_access	No	Boolean	Whether to change the DCS instance to password-free.

### Response Parameters

**Status code: 200**

**Table 4-64** Response body parameters

Parameter	Type	Description
retry_times_left	String	Number of remaining password attempts.
lock_time	String	Lock duration.
lock_time_left	String	Remaining time before the account is unlocked.

**Status code: 400**

**Table 4-65** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-66** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Resetting the password of the DCS instance by entering a new password

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/password/reset
{
  "new_password": "xxxxxx",
  "no_password_access": false
}
```

## Example Responses

**Status code: 200**

The password is changed successfully.

```
{
  "lock_time": "0",
  "lock_time_left": "0",
  "retry_times_left": "5"
}
```

## Status Codes

Status Code	Description
200	The password is changed successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.2.4 Querying DCS Instance Statuses

### Function

This API is used to query the number of instances in different states.

### URI

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

**Table 4-67** Path Parameters

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

**Table 4-68** Query Parameters

Parameter	Mandatory	Type	Description
include_failure	No	String	Whether to return the number of instances that fail to be created. <ul style="list-style-type: none"> <li><b>true:</b> The number of instances that failed to be created will be returned.</li> <li><b>false</b> or other values: The number of instances that failed to be created will not be returned.</li> </ul>

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-69** Response body parameters

Parameter	Type	Description
redis	StatusStatistic object	Redis instance quantity statistics.
memcached	StatusStatistic object	Memcached instance quantity statistics.
paying_count	Integer	Number of instances for which payment is in progress.
freezing_count	Integer	Number of instances that are being frozen.
migrating_count	Integer	Number of instances on which data migration is in progress.
flushing_count	Integer	Number of instances whose data is being cleared.
upgrading_count	Integer	Number of instances that are being upgraded.
restoring_count	Integer	Number of instances for which data restoration is in progress.
extending_count	Integer	Number of instances that are being scaled up.
creating_count	Integer	Number of instances that are being created.
running_count	Integer	Number of running instances.
error_count	Integer	Number of abnormal instances.
frozen_count	Integer	Number of instances that have been frozen.
createfailed_count	Integer	Number of instances that failed to be created.
restarting_count	Integer	Number of instances that are being restarted.

**Table 4-70** StatusStatistic

Parameter	Type	Description
paying_count	Integer	Number of instances for which payment is in progress.
freezing_count	Integer	Number of instances that are being frozen.
migrating_count	Integer	Number of instances on which data migration is in progress.
flushing_count	Integer	Number of instances whose data is being cleared.
upgrading_count	Integer	Number of instances that are being upgraded.
restoring_count	Integer	Number of instances for which data restoration is in progress.
extending_count	Integer	Number of instances that are being scaled up.
creating_count	Integer	Number of instances that are being created.
running_count	Integer	Number of running instances.
error_count	Integer	Number of abnormal instances.
frozen_count	Integer	Number of instances that have been frozen.
createfailed_count	Integer	Number of instances that failed to be created.
restarting_count	Integer	Number of instances that are being restarted.

**Status code: 400**

**Table 4-71** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>



Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-72** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/status?include_failure=true
```

## Example Responses

**Status code: 200**

DCS instance quantity queried successfully.

```
{
  "extending_count" : 0,
  "creating_count" : 0,
  "running_count" : 16,
  "error_count" : 0,
  "frozen_count" : 0,
  "createfailed_count" : 44,
  "restarting_count" : 0,
  "paying_count" : 0,
  "freezing_count" : 0,
  "migrating_count" : 0,
  "flushing_count" : 0,
  "upgrading_count" : 0,
  "redis" : {
    "extending_count" : 0,
    "creating_count" : 0,
    "running_count" : 8,
    "error_count" : 0,
    "frozen_count" : 0,
    "createfailed_count" : 22,
    "restarting_count" : 0,
    "paying_count" : 0,
    "freezing_count" : 0,
    "migrating_count" : 0,
```

```

    "flushing_count" : 0,
    "upgrading_count" : 0
  },
  "memcached" : {
    "extending_count" : 0,
    "creating_count" : 0,
    "running_count" : 8,
    "error_count" : 0,
    "frozen_count" : 0,
    "createfailed_count" : 22,
    "restarting_count" : 0,
    "paying_count" : 0,
    "freezing_count" : 0,
    "migrating_count" : 0,
    "flushing_count" : 0,
    "upgrading_count" : 0
  }
}

```

## Status Codes

Status Code	Description
200	DCS instance quantity queried successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.2.5 Restarting DCS Instances or Clearing DCS Instance Data

### Function

This API is used to restart a running DCS instance.

Data clearance operations cannot be undone on DCS Redis 4.0 and later instances.

### URI

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

**Table 4-73** Path Parameters

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

## Request Parameters

**Table 4-74** Request body parameters

Parameter	Mandatory	Type	Description
instances	No	Array of strings	List of instance IDs.
action	No	String	Operation on the instance: <b>restart</b> : force restart <b>soft_restart</b> : restart only the instance process <b>flush</b> : clear data <b>NOTE</b> Only DCS Redis 4.0 and later instances can be flushed.

## Response Parameters

**Status code: 200**

**Table 4-75** Response body parameters

Parameter	Type	Description
results	Array of <a href="#">BatchOpsResult</a> objects	Result of deleting, restarting, or clearing data of an instance.

**Table 4-76** BatchOpsResult

Parameter	Type	Description
result	String	Instance deletion result. Options: <b>success</b> and <b>failed</b> .
instance	String	DCS instance ID.

**Status code: 400**

**Table 4-77** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>

Parameter	Type	Description
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-78** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Force restarting a DCS instance

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/status
{
  "instances": [ "2e803f66-fbb0-47ad-b6cb-fb87f5bed4ef" ],
  "action": "restart"
}
```

## Example Responses

**Status code: 200**

DCS instances restarted successfully or the instance data cleared successfully.

```
{
  "results": [ {
    "instance": "e3a7019c-8824-4c1a-8289-5300f19b9f64",
    "result": "success"
  } ]
}
```

## Status Codes

Status Code	Description
200	DCS instances restarted successfully or the instance data cleared successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.2.6 Querying Statistics of All Running Instances

### Function

This API is used to query the statistics of all DCS instances that are in the **Running** state.

### URI

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

**Table 4-79** Path Parameters

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

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 4-80** Response body parameters

Parameter	Type	Description
statistics	Array of <a href="#">InstanceStatistic</a> objects	Statistics of all instances in the <b>Running</b> state.

**Table 4-81** InstanceStatistic

Parameter	Type	Description
input_kbps	String	Incoming traffic (kbit/s) of the DCS instance.
output_kbps	String	Outgoing traffic (kbit/s) of the DCS instance.
instance_id	String	Instance ID.
keys	Long	Number of cached data records
used_memory	Long	Used memory size in MB.
max_memory	Long	Total memory size in MB.
cmd_get_count	Long	Number of times the GET command is run.
cmd_set_count	Long	Number of times the SET command is run.
used_cpu	String	Accumulated CPU time consumed by the cache in the user state and kernel state, in seconds.

**Status code: 400**

**Table 4-82** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-83** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>

Parameter	Type	Description
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/statistic
```

## Example Responses

**Status code: 200**

Instance statistics queried successfully.

```
{
  "statistics": [ {
    "output_kbps": "0.0",
    "instance_id": "e008652d-18e0-43ff-924e-072261e0372a",
    "keys": 0,
    "used_memory": 0,
    "cmd_get_count": 0,
    "used_cpu": "0.0",
    "cmd_set_count": 0,
    "input_kbps": "0.0",
    "max_memory": 460
  }, {
    "output_kbps": "0.0",
    "instance_id": "c577a1eb-33b7-42c7-8231-ad32358599ac",
    "keys": 0,
    "used_memory": 0,
    "cmd_get_count": 0,
    "used_cpu": "0.0",
    "cmd_set_count": 0,
    "input_kbps": "0.0",
    "max_memory": 460
  }, {
    "output_kbps": "1.19",
    "instance_id": "e8b98471-55d5-4695-b0bb-8f336a98e207",
    "keys": 0,
    "used_memory": 0,
    "cmd_get_count": 0,
    "used_cpu": "0.0",
    "cmd_set_count": 0,
    "input_kbps": "0.03",
    "max_memory": 460
  }, {
    "output_kbps": "0.0",
    "instance_id": "bc61c690-4b34-4cbe-9ce3-11246aea7aba",
    "keys": 0,
    "used_memory": 0,
    "cmd_get_count": 0,
    "used_cpu": "0.0",
    "cmd_set_count": 0,
    "input_kbps": "0.0",
    "max_memory": 6963
  }
  ]
}
```

## Status Codes

Status Code	Description
200	Instance statistics queried successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

# 4.3 Shards and Replicas

## 4.3.1 Configuring Replica Priority

### Function

This API is used to configure the replica priority. When the master node is faulty, a replica with a smaller weight has a higher priority to be promoted to master.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/groups/{group\_id}/replications/{node\_id}/slave-priority

**Table 4-84** Path Parameters

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



## Request Parameters

**Table 4-85** Request body parameters

Parameter	Mandatory	Type	Description
slave_priority_weight	Yes	Integer	Replica priority. The value ranges from 0 to 100. Value <b>0</b> indicates that the promotion is disabled by default.

## Response Parameters

**Status code: 400**

**Table 4-86** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-87** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-88** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-89** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-90** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Setting the replica priority to 100

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/groups/{group_id}/replications/  
{node_id}/slave-priority  
  
{  
  "slave_priority_weight" : 100  
}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	Replica priority configured successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.3.2 Querying Details of Shards

### Function

This API is used to query information about shards and replicas of Redis 4.0 and later instances (single-node ones not included).

### URI

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

**Table 4-91** Path Parameters

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

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-92** Response body parameters

Parameter	Type	Description
group_list	Array of <a href="#">InstanceGroupListInfo</a> objects	List of shards.
group_count	Integer	Total number of shards in the instance.

**Table 4-93** InstanceGroupListInfo

Parameter	Type	Description
group_id	String	Shard ID.
group_name	String	Shard name.
replication_list	Array of <a href="#">InstanceReplicationListInfo</a> objects	List of replicas in the shard.

**Table 4-94** InstanceReplicationListInfo

Parameter	Type	Description
replication_role	String	Role of the replica. Options: <ul style="list-style-type: none"> <li><b>master</b>: master</li> <li><b>slave</b>: replica</li> </ul>
replication_ip	String	Replica IP address.
is_replication	Boolean	Whether the replica is a newly added one.
replication_id	String	Replica ID.

Parameter	Type	Description
node_id	String	Node ID.
status	String	Replica status. Enumeration values: <ul style="list-style-type: none"> <li>• <b>Active</b></li> <li>• <b>Inactive</b></li> </ul>
az_code	String	AZ where the replica is in.
dimensions	Array of <a href="#">InstanceReplicationDimensionsInfo</a> objects	Monitoring metric dimension of the replica used to call the Cloud Eye API for querying monitoring metrics. <ul style="list-style-type: none"> <li>• Replica monitoring is multi-dimensional. The returned array contains information about two dimensions. When querying monitoring data from Cloud Eye, transfer parameters of multiple dimensions to obtain the metric data.</li> <li>• The first dimension is the primary dimension of the replica. The dimension name is <b>dc_instance_id</b>, and the dimension value corresponds to the ID of the instance to which the replica belongs.</li> <li>• The name of the second dimension is <b>dc_cluster_redis_node</b>, and the dimension value is the ID of the monitored object of the replica, which is different from the replica ID or node ID.</li> </ul>

**Table 4-95** InstanceReplicationDimensionsInfo

Parameter	Type	Description
name	String	Monitoring dimension name.
value	String	Dimension value.

**Status code: 500**

**Table 4-96** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>

Parameter	Type	Description
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 400**

**Table 4-97** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instance/{instance_id}/groups
```

## Example Responses

**Status code: 200**

Details of shards and replicas queried successfully.

```
{
  "group_list": [ {
    "group_id": "35e1bed6-7de5-4898-9eb2-c362c783df15",
    "group_name": "group-0",
    "replication_list": [ {
      "az_code": "region01",
      "is_replication": false,
      "node_id": "8abfa7aa73291f15017329e1cda0002d",
      "replication_id": "dfbd3f84-08bc-42f0-b538-01d03e6dc178",
      "replication_ip": "192.168.76.25",
      "replication_role": "master",
      "status": "Active",
      "dimensions": [ {
        "name": "dcs_instance_id",
        "value": "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
      }, {
        "name": "dcs_cluster_redis_node",
        "value": "8263dc69629c5b2d840e9816fa9c6200"
      } ]
    } ]
  }, {
  } ]
}
```

```

"az_code" : "region01",
"is_replication" : false,
"node_id" : "8abfa7aa73291f15017329e1cdb0002e",
"replication_id" : "63d4c880-7050-464f-ab19-c8a297474d7d",
"replication_ip" : "192.168.78.207",
"replication_role" : "slave",
"status" : "Active",
"dimensions" : [ {
  "name" : "dcs_instance_id",
  "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
}, {
  "name" : "dcs_cluster_redis_node",
  "value" : "8263dc69629c5b2d840e9816fa9c6201"
} ]
} ]
}, {
"group_id" : "579a281f-6e63-4822-b0c7-e45c44b7c807",
"group_name" : "group-1",
"replication_list" : [ {
  "az_code" : "region01",
  "is_replication" : false,
  "node_id" : "8abfa7aa73291f15017329e1cdb0002f",
  "replication_id" : "6284c192-48d1-462b-8fd9-45dad067c1a2",
  "replication_ip" : "192.168.73.164",
  "replication_role" : "master",
  "status" : "Active",
  "dimensions" : [ {
    "name" : "dcs_instance_id",
    "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
  }, {
    "name" : "dcs_cluster_redis_node",
    "value" : "8263dc69629c5b2d840e9816fa9c6202"
  } ]
}, {
  "az_code" : "region01",
  "is_replication" : false,
  "node_id" : "8abfa7aa73291f15017329e1cdc80030",
  "replication_id" : "b927de3b-42f3-45b5-b0e4-8547f0ef6727",
  "replication_ip" : "192.168.77.172",
  "replication_role" : "slave",
  "status" : "Active",
  "dimensions" : [ {
    "name" : "dcs_instance_id",
    "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
  }, {
    "name" : "dcs_cluster_redis_node",
    "value" : "8263dc69629c5b2d840e9816fa9c6203"
  } ]
} ]
}, {
"group_id" : "c17305c6-6651-42d9-86bf-5a6087076eb7",
"group_name" : "group-2",
"replication_list" : [ {
  "az_code" : "region01",
  "is_replication" : false,
  "node_id" : "8abfa7aa73291f15017329e1cdd90031",
  "replication_id" : "caa6636d-a5c1-43b8-990a-3dc134da4522",
  "replication_ip" : "192.168.76.143",
  "replication_role" : "master",
  "status" : "Active",
  "dimensions" : [ {
    "name" : "dcs_instance_id",
    "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
  }, {
    "name" : "dcs_cluster_redis_node",
    "value" : "8263dc69629c5b2d840e9816fa9c6204"
  } ]
}, {
  "az_code" : "region01",

```

```

"is_replication" : false,
"node_id" : "8abfa7aa73291f15017329e1cde50032",
"replication_id" : "4f46790d-a0b0-4a1b-aa02-1c554fccf62d",
"replication_ip" : "192.168.72.66",
"replication_role" : "slave",
"status" : "Active",
"dimensions" : [ {
  "name" : "dcs_instance_id",
  "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
}, {
  "name" : "dcs_cluster_redis_node",
  "value" : "8263dc69629c5b2d840e9816fa9c6205"
} ]
} ],
"group_count" : 3
}

```

## Status Codes

Status Code	Description
200	Details of shards and replicas queried successfully.
500	Internal service error.
400	Invalid request.

## Error Codes

See [Error Codes](#).

### 4.3.3 Querying Instance Nodes in Batches

#### Function

This API is used to query the node information, number of valid instances, and number of nodes of all instances in a specified project. No node information will be returned when the instance is being created. Available for Redis 4.0 and later instances.

#### Constraints

Available for Redis 4.0 and later instances.

#### URI

GET /v2/{project\_id}/instances-logical-nodes



**Table 4-98** Path Parameters

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

**Table 4-99** 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 items displayed on each page. The maximum value is <b>1000*</b> . If this parameter is not specified, 10 items are displayed on each page by default.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-100** Response body parameters

Parameter	Type	Description
count	Integer	Total number of instances in the query result.
instances	Array of <a href="#">InstanceNodesInfoResp</a> objects	Instance list.

**Table 4-101** InstanceNodesInfoResp

Parameter	Type	Description
instance_id	String	Instance ID.
node_count	Integer	Total number of nodes of the current instance.

Parameter	Type	Description
nodes	Array of <b>NodesInfoResp</b> objects	Node details.

**Table 4-102** NodesInfoResp

Parameter	Type	Description
logical_node_id	String	Logical node ID.
name	String	Node name.
status	String	Node status. The value can be: <ul style="list-style-type: none"> <li>• <b>Creating</b></li> <li>• <b>Active</b>: running</li> <li>• <b>Inactive</b>: faulty</li> <li>• <b>Deleting</b></li> <li>• <b>AddSharding</b>: Shards are being added.</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>Creating</b></li> <li>• <b>Active</b></li> <li>• <b>Inactive</b></li> <li>• <b>Deleting</b></li> <li>• <b>AddSharding</b></li> </ul>
az_code	String	AZ code.
node_role	String	Node type. Options: <ul style="list-style-type: none"> <li>• <b>redis-server</b>: Redis server node</li> <li>• <b>redis-proxy</b>: proxy node</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>redis-server</b></li> <li>• <b>redis-proxy</b></li> </ul>
node_type	String	Node role. Options: <ul style="list-style-type: none"> <li>• <b>master</b>: master node</li> <li>• <b>slave</b>: standby node</li> <li>• <b>proxy</b>: node of a Proxy Cluster instance</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>master</b></li> <li>• <b>slave</b></li> <li>• <b>proxy</b></li> </ul>

Parameter	Type	Description
node_ip	String	Node IP address.
node_port	String	Node port.
node_id	String	Node ID.
priority_weight	Integer	Replica promotion priority.
is_access	Boolean	Whether the IP address of the node can be directly accessed.
group_id	String	Shard ID.
group_name	String	Shard name.
is_remove_ip	Boolean	Whether the IP address is removed from the read-only domain name.
replication_id	String	Replica ID.
dimensions	Array of <a href="#">InstanceReplicationDimensionsInfo</a> objects	<p>Monitoring metric dimension of the replica used to call the Cloud Eye API for querying monitoring metrics.</p> <ul style="list-style-type: none"> <li>Replica monitoring is multi-dimensional. The returned array contains information about two dimensions. When querying monitoring data from Cloud Eye, transfer parameters of multiple dimensions to obtain the metric data.</li> <li>The first dimension is the primary dimension of the replica. The dimension name is <b>dc_instance_id</b>, and the dimension value is the ID of the instance where the replica is located.</li> <li>The name of the second dimension is <b>dc_cluster_redis_node</b>, and the dimension value is the ID of the monitored object of the replica, which is different from the replica ID or node ID.</li> </ul>

**Table 4-103** InstanceReplicationDimensionsInfo

Parameter	Type	Description
name	String	Monitoring dimension name.
value	String	Dimension value.

**Status code: 500**

**Table 4-104** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 400**

**Table 4-105** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances-logical-nodes?offset={offset}&limit={limit}
```

## Example Responses

**Status code: 200**

Node information queried successfully.

```
{
  "count": 1,
  "instances": [ {
    "instance_id": "b4468cb1-4f75-4866-a49d-86959acc0c9c",
    "node_count": 2,
    "nodes": [ {
      "logical_node_id": "8f997eb512a92834bf5914be52ca8919",
      "name": "(replica)192.168.0.178",
      "status": "Active",
      "az_code": "region01",
      "node_role": "redis-server",
      "node_type": "slave",
      "node_ip": "192.168.0.178",
      "node_port": "6379",
```

```
"node_id" : "8a2c26c17f4d6516017f4d7b77940030",
"is_access" : true,
"group_id" : "ace962d1-7841-4e50-9313-c239fd75dee3",
"group_name" : "group-0",
"priority_weight" : 100,
"is_remove_ip" : false,
"replication_id" : "e40aa09e-03c2-4319-86eb-5ef4ca637544",
"dimensions" : [ {
  "name" : "dcs_instance_id",
  "value" : "caf2d19f-7783-44b0-be46-8c9da3ef1e94"
}, {
  "name" : "dcs_cluster_redis_node",
  "value" : "8263dc69629c5b2d840e9816fa9c6200"
} ]
} ]
} ]
}
```

**Status code: 500**

Internal service error.

```
{
  "error_code" : "DCS.5000",
  "error_msg" : "Internal service error."
}
```

**Status code: 400**

Invalid request.

```
{
  "error_code" : "DCS.4800",
  "error_msg" : "Invalid offset in the request."
}
```

## Status Codes

Status Code	Description
200	Node information queried successfully.
500	Internal service error.
400	Invalid request.

## Error Codes

See [Error Codes](#).

# 4.4 Parameter Management

## 4.4.1 Querying DCS Instance Configuration Parameters

### Function

This API is used to query the configuration parameters of a DCS instance.

## URI

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

**Table 4-106** Path Parameters

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

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-107** Response body parameters

Parameter	Type	Description
config_time	String	Time when the instance was operated on. For example, 2017-03-31T12:24:46.297Z.
instance_id	String	Instance ID.
redis_config	Array of <a href="#">QueryRedisConfig</a> objects	Array of configuration items of the DCS instance.
config_status	String	DCS instance status that is being modified or has been modified. Options: <ul style="list-style-type: none"> <li>• <b>UPDATING</b></li> <li>• <b>FAILURE</b></li> <li>• <b>SUCCESS</b></li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>UPDATING</b></li> <li>• <b>FAILURE</b></li> <li>• <b>SUCCESS</b></li> </ul>
status	String	Instance status.

**Table 4-108** QueryRedisConfig

Parameter	Type	Description
param_value	String	Configuration parameter value.
value_type	String	Type of the configuration parameter value.
value_range	String	Range of the configuration parameter value.
description	String	Description of the configuration item.
default_value	String	Default value of the configuration parameter.
param_name	String	Configuration parameter name.
param_id	String	Configuration parameter ID.

**Status code: 400**

**Table 4-109** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-110** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/configs
```

## Example Responses

**Status code: 200**

Instance configuration parameters queried successfully.

```
{
  "instance_id": "50829e5a-a4fc-4c01-8651-80be8a491602",
  "config_status": "SUCCESS",
  "config_time": "2020-07-06T07:04:31.464Z",
  "redis_config": [ {
    "param_id": "1",
    "param_name": "timeout",
    "description": "Close the connection after a client is idle for N seconds (0 to disable)",
    "param_value": "101",
    "value_range": "0-7200",
    "value_type": "Integer",
    "default_value": "0"
  } ],
  "status": "RUNNING"
}
```

## Status Codes

Status Code	Description
200	Instance configuration parameters queried successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.4.2 Modifying Configuration Parameters

### Function

You can modify the configuration parameters of your DCS instance to optimize DCS performance based on your requirements.

### URI

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



**Table 4-111** Path Parameters

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

## Request Parameters

**Table 4-112** Request body parameters

Parameter	Mandatory	Type	Description
redis_config	No	Array of <a href="#">RedisConfig</a> objects	Array of configuration items of the DCS instance.

**Table 4-113** RedisConfig

Parameter	Mandatory	Type	Description
param_value	Yes	String	Value of the configuration item.
param_name	Yes	String	Configuration item name.
param_id	Yes	String	Configuration item ID.

## Response Parameters

**Status code: 400**

**Table 4-114** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-115** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

### Example Requests

Modifying the instance configuration parameters. For example, set the **timeout** parameter (maximum amount of idle time after which a client connection is terminated) to 1000 seconds.

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/configs
{
  "redis_config": [ {
    "param_id": "1",
    "param_name": "timeout",
    "param_value": "1000"
  } ]
}
```

### Example Responses

None

### Status Codes

Status Code	Description
204	DCS instance configurations modified successfully.
400	Invalid request.
500	Internal service error.

### Error Codes

See [Error Codes](#).

## 4.5 Backup and Restoration

### 4.5.1 Deleting Backup Files

#### Function

This API is used to delete the backup files of a DCS instance.

#### URI

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

**Table 4-116** Path Parameters

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

#### Request Parameters

None

#### Response Parameters

**Status code: 400**

**Table 4-117** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-118** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
DELETE https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/backups/{backup_id}
```

## Example Responses

None

## Status Codes

Status Code	Description
204	Backup file deleted successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.5.2 Restoring a DCS Instance

### Function

This API is used to restore the backup data to a specific DCS instance.

#### NOTE

Only master/standby and cluster DCS instances can be backed up and restored, while single-node instances cannot.

### URI

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

**Table 4-119** Path Parameters

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

## Request Parameters

**Table 4-120** Request body parameters

Parameter	Mandatory	Type	Description
backup_id	Yes	String	Backup ID.
remark	No	String	Description of DCS instance restoration.

## Response Parameters

**Status code: 200**

**Table 4-121** Response body parameters

Parameter	Type	Description
restore_id	String	ID of the restoration record.

**Status code: 400**

**Table 4-122** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-123** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Restoring the backup files of the DCS instance

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/restores
{
  "backup_id" : "8ba256cb-e5ac-44f6-a3da-c03d8f0e5029",
  "remark" : "restore instance"
}
```

## Example Responses

**Status code: 200**

Instance restored successfully.

```
{
  "restore_id" : "a6155972-800c-4170-a479-3231e907d2f6"
}
```

## Status Codes

Status Code	Description
200	Instance restored successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.5.3 Querying DCS Instance Restoration Records

### Function

This API is used to query the restoration records of a specific DCS instance.

### URI

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

**Table 4-124** Path Parameters

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

**Table 4-125** Query Parameters

Parameter	Mandatory	Type	Description
begin_time	No	String	Start time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.
end_time	No	String	End time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.
limit	No	Integer	Number of items displayed on each page.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 4-126** Response body parameters

Parameter	Type	Description
restore_record_response	Array of <a href="#">InstanceRestoreInfo</a> objects	Array of the restoration records.
total_num	Integer	Total number.

**Table 4-127** InstanceRestoreInfo

Parameter	Type	Description
backup_id	String	Backup ID.
restore_id	String	ID of the restoration record.
backup_name	String	Backup record name.
updated_at	String	Time when the restoration completed.
restore_remark	String	Description of the restoration.
created_at	String	Time when the restoration task was created.
progress	String	Restoration progress.
error_code	String	Error code displayed for a restoration failure. <ul style="list-style-type: none"> <li>● <b>dc.08.0001</b> - Failed to start the backup and restoration tool.</li> <li>● <b>dc.08.0002</b> - Execution timed out.</li> <li>● <b>dc.08.0003</b> - Failed to delete the bucket.</li> <li>● <b>dc.08.0004</b> - Failed to obtain the AK/SK.</li> <li>● <b>dc.08.0005</b> - Failed to create a bucket.</li> <li>● <b>dc.08.0006</b> - Failed to query the backup data size.</li> <li>● <b>dc.08.0007</b> - Failed to synchronize data during restoration.</li> <li>● <b>dc.08.0008</b> - The scheduled backup task is not running. The instance is running other tasks.</li> </ul>
restore_name	String	Name of a restoration record.
backup_remark	String	Description of the backup.



Parameter	Type	Description
status	String	Restoration status. <ul style="list-style-type: none"> <li>● <b>waiting</b>: The task is waiting to begin.</li> <li>● <b>restoring</b>: The restoration is in progress.</li> <li>● <b>succeed</b>: The restoration is successful.</li> <li>● <b>failed</b>: The restoration failed.</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>waiting</b></li> <li>● <b>restoring</b></li> <li>● <b>succeed</b></li> <li>● <b>failed</b></li> </ul>

**Status code: 400**

**Table 4-128** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/restores?
offset={offset}&limit={limit}&begin_Time={begin_Time}&end_Time={end_Time}
```

## Example Responses

**Status code: 200**

DCS instance restoration records queried successfully.

```
{
  "restore_record_response" : [ {
    "backup_id" : "f4823e9e-fe9b-4ffd-be79-4e5d6de272bb",
    "restore_id" : "a6155972-800c-4170-a479-3231e907d2f6",
    "backup_name" : "backup_20170718000002",
    "updated_at" : "2017-07-18T21:41:35.182Z",
    "restore_remark" : "doctest",
    "created_at" : "2017-07-18T21:41:20.721Z",
    "progress" : "100.00",
    "error_code" : { },
  } ],
}
```

```

"restore_name": "restore_20170718214120",
"backup_remark": { },
"status": "succeed"
}],
"total_num": 1
}

```

## Status Codes

Status Code	Description
200	DCS instance restoration records queried successfully.
204	No instance restoration record found.
400	Invalid request.

## Error Codes

See [Error Codes](#).

## 4.5.4 Obtaining the Backup File URL

### Function

This API is used to obtain the download links of backup files.

### URI

POST /v2/{project\_id}/instances/{instance\_id}/backups/{backup\_id}/links

**Table 4-129** Path Parameters

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

## Request Parameters

**Table 4-130** Request body parameters

Parameter	Mandatory	Type	Description
expiration	Yes	Integer	Validity period (in seconds) of a URL. The value range is from 5 minutes to 24 hours.

## Response Parameters

**Status code: 200**

**Table 4-131** Response body parameters

Parameter	Type	Description
file_path	String	Paths of files in the OBS bucket.
bucket_name	String	Name of the OBS bucket.
links	Array of <a href="#">LinkItem</a> objects	Collection of URLs for downloading backup files. A maximum of 64 links are allowed.

**Table 4-132** LinkItem

Parameter	Type	Description
file_name	String	Backup file name.
link	String	URL for downloading backup files.

**Status code: 400**

**Table 4-133** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-134** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Obtaining the download links of backup files with 1800s validity

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/backups/{backup_id}/links
{
  "expiration" : 1800
}
```

## Example Responses

**Status code: 200**

Successfully obtained backup file URLs.

```
{
  "file_path" : "42489641-23c4-4855-bc89-befc85e2b7f7/ddfe5f66-a965-43ff-aec7-f3b489dc071b/",
  "bucket_name" : "bucket5da9cf3bfabc4cae9023695b934e5e2b",
  "links" : [ {
    "file_name" : "redis_192.168.63.250_6379_10923-16383_20190820211816.rdb",
    "link" : "https://bucket5da9cf3bfabc4cae9023695b934e5e2b.{obs_endpoint}:443/42489641-23c4-4855-bc89-befc85e2b7f7/ddfe5f66-a965-43ff-aec7-f3b489dc071b/redis_192.168.63.250_6379_10923-16383_20190820211816.rdb?AWSAccessKeyId=VD8CEQNG8VMQODUAAM0D&Expires=1566308915&Signature=s3I%2BrLbo%2BFZw%2BUjVere%2FOQdKEg%3D"
  } ]
}
```

## Status Codes

Status Code	Description
200	Successfully obtained backup file URLs.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.5.5 Backing Up a DCS Instance

### Function

This API is used to back up a specific DCS instance.

#### NOTE

Only master/standby and cluster DCS instances can be backed up and restored, while single-node instances cannot.

### URI

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

**Table 4-135** Path Parameters

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

### Request Parameters

**Table 4-136** Request body parameters

Parameter	Mandatory	Type	Description
remark	No	String	Description of DCS instance backup.

Parameter	Mandatory	Type	Description
backup_format	No	String	Format of the DCS instance backup. Enumeration values: <ul style="list-style-type: none"> <li>• <b>aof</b></li> <li>• <b>rdb</b></li> </ul>

## Response Parameters

**Status code: 200**

**Table 4-137** Response body parameters

Parameter	Type	Description
backup_id	String	Backup ID.

**Status code: 400**

**Table 4-138** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-139** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Backing up a specified DCS instance to an AOF file

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/backups
{
  "remark": "Backup instances",
  "backup_format": "aof"
}
```

## Example Responses

**Status code: 200**

The specified DCS instance is backed up successfully.

```
{
  "backup_id": "548ceeff-2cbb-47ab-9a1c-7b085a8c08d7"
}
```

## Status Codes

Status Code	Description
200	The specified DCS instance is backed up successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.5.6 Listing DCS Instance Backup Records

### Function

This API is used to query the backup records of a specific DCS instance.

### URI

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

**Table 4-140** Path Parameters

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

**Table 4-141** Query Parameters

Parameter	Mandatory	Type	Description
begin_time	No	String	Query start time (UTC). Format: yyyyMMddHHmmss, for example, 20170718235959.
end_time	No	String	Query end time (UTC). Format: yyyyMMddHHmmss, for example, 20170718235959.
limit	No	Integer	Number of items displayed on each page.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-142** Response body parameters

Parameter	Type	Description
total_num	Integer	Number of returned records.
backup_record_response	Array of <a href="#">BackupRecordResponse</a> objects	Array of the backup details.



**Table 4-143** BackupRecordResponse

Parameter	Type	Description
backup_id	String	Backup ID.
period	String	Backup execution time.
backup_name	String	Backup record name.
instance_id	String	Instance ID.
size	Long	Size of the backup file (byte).
backup_type	String	Backup type. <ul style="list-style-type: none"> <li>● <b>manual</b>: manual backup</li> <li>● <b>auto</b>: automatic backup</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>manual</b></li> <li>● <b>auto</b></li> </ul>
created_at	String	Time when the backup task is created.
updated_at	String	Time at which DCS instance backup is completed.
progress	String	Backup progress.
error_code	String	Error code displayed for a backup failure. <ul style="list-style-type: none"> <li>● <i>dcs.08.0001</i> - Failed to start the backup and restoration tool.</li> <li>● <i>dcs.08.0002</i> - Execution timed out.</li> <li>● <i>dcs.08.0003</i> - Failed to delete the bucket.</li> <li>● <i>dcs.08.0004</i> - Failed to obtain the AK/SK.</li> <li>● <i>dcs.08.0005</i> - Failed to create the bucket.</li> <li>● <i>dcs.08.0006</i> - Failed to query the backup data size.</li> <li>● <i>dcs.08.0007</i> - Failed to synchronize data during restoration.</li> <li>● <i>dcs.08.0008</i> - The scheduled backup task is not running. The instance is running other tasks.</li> </ul>
remark	String	Description of DCS instance backup.

Parameter	Type	Description
status	String	Backup status. The options are as follows: <ul style="list-style-type: none"> <li>● <b>waiting</b>: The task is waiting to begin.</li> <li>● <b>backuping</b>: DCS instance backup is in progress.</li> <li>● <b>succeed</b>: DCS instance backup succeeded.</li> <li>● <b>failed</b>: DCS instance backup failed.</li> <li>● <b>expired</b>: The backup file has expired.</li> <li>● <b>deleted</b>: The backup file has been deleted manually.</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>waiting</b></li> <li>● <b>backuping</b></li> <li>● <b>succeed</b></li> <li>● <b>failed</b></li> <li>● <b>expired</b></li> <li>● <b>deleted</b></li> </ul>
is_support_restore	String	Whether restoration is supported. Options: <b>TRUE</b> and <b>FALSE</b> .
execution_at	String	Execution time.
backup_format	String	Backup format. Enumeration values: <ul style="list-style-type: none"> <li>● <b>aof</b></li> <li>● <b>rdb</b></li> </ul>

**Status code: 400**

**Table 4-144** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-145** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/backups?
offset={offset}&limit={limit}&beginTime={begin_Time}&end_time={end_Time}
```

## Example Responses

**Status code: 200**

DCS instance backup records queried successfully.

```
{
  "total_num" : 1,
  "backup_record_response" : [ {
    "period" : { },
    "backup_type" : "manual",
    "created_at" : "2019-05-10T08:31:16.166Z",
    "remark" : "001",
    "is_support_restore" : "TRUE",
    "backup_id" : "4631832a-14c6-45b0-a0b3-3abd8f591ad1",
    "backup_name" : "backup_20190510163116",
    "instance_id" : "5560df16-cebf-4473-95c4-d1b573c16e79",
    "size" : 880232,
    "updated_at" : "2019-05-10T08:32:30.546Z",
    "progress" : "100.00",
    "error_code" : { },
    "status" : "succeed",
    "execution_at" : "2019-05-11T08:31:16.166Z",
    "backup_format" : "aof"
  } ]
}
```

## Status Codes

Status Code	Description
200	DCS instance backup records queried successfully.
204	No DCS instance backup record is found.

Status Code	Description
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

# 4.6 Data Migration

## 4.6.1 Creating a Backup Import Task

### Function

This API is used to create a backup import task.

### URI

POST /v2/{project\_id}/migration-task

**Table 4-146** Path Parameters

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

### Request Parameters

**Table 4-147** Request body parameters

Parameter	Mandatory	Type	Description
task_name	Yes	String	Backup import task name.
description	No	String	Backup import task description.

Parameter	Mandatory	Type	Description
migration_type	Yes	String	<p>Migration mode. Options:</p> <ul style="list-style-type: none"> <li>• <b>backupfile_import</b>: importing backup files</li> <li>• <b>online_migration</b>: migrating data online This API can no longer be used to create an online migration task. Please call <a href="#">CreateOnlineMigration-Task</a> instead.</li> </ul> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>backupfile_import</b></li> </ul>
migration_method	Yes	String	<p>Type of the migration, which can be full migration or incremental migration. Values:</p> <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b>: full migration</li> <li>• <b>incremental_migration</b>: incremental migration</li> </ul> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b></li> <li>• <b>incremental_migration</b></li> </ul>
backup_files	No	<a href="#">BackupFilesBody</a> object	Backup files to be imported when the migration mode is backup file import.
network_type	No	String	<p>Type of the network for communication between the source and target Redis when the migration mode is online data migration. This API can no longer be used to create an online migration task. Please call <a href="#">CreateOnlineMigration-Task</a> instead.</p> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>vpc</b></li> <li>• <b>vpn</b></li> </ul>

Parameter	Mandatory	Type	Description
source_instance	No	<a href="#">SourceInstanceBody</a> object	Source Redis information. This parameter is mandatory when the migration mode is online data migration. This API can no longer be used to create an online migration task. Please call <a href="#">CreateOnlineMigrationTask</a> instead.
target_instance	Yes	<a href="#">TargetInstanceBody</a> object	Target Redis information.

**Table 4-148** BackupFilesBody

Parameter	Mandatory	Type	Description
file_source	No	String	Data source, which can be an OBS bucket or a backup record. Enumeration values: <ul style="list-style-type: none"> <li>• <b>self_build_obs</b></li> <li>• <b>backup_record</b></li> </ul>
bucket_name	No	String	Name of the OBS bucket.
files	Yes	Array of <a href="#">Files</a> objects	List of backup files to be imported. This parameter is mandatory when the data source is an OBS bucket.
backup_id	No	String	Backup record ID. This parameter is mandatory when the data source is a backup record.

**Table 4-149** Files

Parameter	Mandatory	Type	Description
file_name	Yes	String	Name of a backup file.
size	No	String	File size in bytes.
update_at	No	String	Time when the file was last modified. The format is YYYY-MM-DD HH:MM:SS.

**Table 4-150** SourceInstanceBody

Parameter	Mandatory	Type	Description
addr	Yes	String	Source Redis address (specified in the <b>source_instance</b> parameter).
password	No	String	Redis password. If a password is set, this parameter is mandatory.
task_status	No	String	Task status.
id	No	String	Redis instance ID.
ip	No	String	Redis IP address.
port	No	String	Redis port.
name	No	String	Redis name.
proxy_multi_db	No	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.
db	No	String	Redis database.

**Table 4-151** TargetInstanceBody

Parameter	Mandatory	Type	Description
id	Yes	String	Redis instance ID (mandatory in the <b>target_instance</b> parameter).
name	No	String	Redis instance name (specified in the <b>target_instance</b> parameter).
password	No	String	Redis password. If a password is set, this parameter is mandatory.
task_status	No	String	Task status.
ip	No	String	Redis IP address.
port	No	String	Redis port.
addr	No	String	Redis instance address.
proxy_multi_db	No	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.

Parameter	Mandatory	Type	Description
db	No	String	Redis database.

## Response Parameters

**Status code: 200**

**Table 4-152** Response body parameters

Parameter	Type	Description
id	String	Migration task ID.
name	String	Migration task name.
status	String	Migration status. Options: <b>SUCCESS, FAILED, MIGRATING, TERMINATED</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>SUCCESS</b></li> <li>• <b>FAILED</b></li> <li>• <b>MIGRATING</b></li> <li>• <b>TERMINATED</b></li> </ul>
error	String	Error message.

**Status code: 400**

**Table 4-153** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**



**Table 4-154** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-155** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-156** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-157** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Creating a backup import task to migrate data from an OBS bucket

POST https://{dcs\_endpoint}/v2/{project\_id}/migration-task

```
{
  "task_name": "migration1",
  "description": "Test",
  "migration_type": "backupfile_import",
  "migration_method": "full_amount_migration",
  "backup_files": {
    "bucket_name": "bucketName",
    "file_source": "self_build_obs",
    "files": [ {
      "size": "754.0MB",
      "file_name": "fileName"
    } ]
  },
  "target_instance": {
    "id": "d2c8399f-bdba-43c1-8069-3ff17a1a79d5",
    "name": "dcs-test",
    "password": "xxxxxx"
  }
}
```

## Example Responses

**Status code: 200**

Backup import task created.

```
{
  "id": "8aa6999e71cb638b0171f485f5266ef0",
  "name": "dcs-test",
  "status": "MIGRATING",
  "error": ""
}
```

## Status Codes

Status Code	Description
200	Backup import task created.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.2 Listing Migration Tasks

### Function

This API is used to query the migration task list.

### URI

GET /v2/{project\_id}/migration-tasks

**Table 4-158** Path Parameters

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

**Table 4-159** 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 items displayed on each page.
name	No	String	Name of the migration task.

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-160** Response body parameters

Parameter	Type	Description
count	Integer	Number of migration tasks.
migration_tasks	Array of <a href="#">MigrationTaskList</a> objects	Migration task list.

**Table 4-161** MigrationTaskList

Parameter	Type	Description
task_id	String	Migration task ID.
task_name	String	Migration task name.
status	String	Migration status. Options: <b>SUCCESS</b> , <b>FAILED</b> , <b>MIGRATING</b> , <b>TERMINATED</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>SUCCESS</b></li> <li>• <b>FAILED</b></li> <li>• <b>MIGRATING</b></li> <li>• <b>TERMINATED</b></li> </ul>
migration_type	String	Migration mode, which can be backup file import or online migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>backupfile_import</b></li> <li>• <b>online_migration</b></li> </ul>
migration_method	String	Type of the migration, which can be full migration or incremental migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b></li> <li>• <b>incremental_migration</b></li> </ul>
ecs_tenant_private_ip	String	Private IP address of the migration ECS on the tenant side. This IP address can be added to the whitelist if it is in the same VPC as the private IP address of the target or source Redis.

Parameter	Type	Description
data_source	String	Source Redis address, which is <b>ip:port</b> or a bucket name.
source_instance_name	String	Name of the source instance. If the source Redis is self-hosted, this parameter is left blank.
source_instance_id	String	ID of the source instance. If the source Redis is self-hosted, this parameter is left blank.
target_instance_addr	String	Target Redis address. The format is <b>ip:port</b> .
target_instance_name	String	Target instance name.
target_instance_id	String	Target instance ID.
created_at	String	Time when the migration task is created.
description	String	Description of the migration task.
source_instance_status	String	Status of the source instance. If the source Redis is self-hosted, this parameter is left blank.
target_instance_status	String	Status of the target instance.
source_instance_subnet_id	String	ID of the source instance subnet. If the source Redis is self-hosted, this parameter is left blank.
target_instance_subnet_id	String	ID of the target instance subnet.
source_instance_spec_code	String	Specification code of the source instance. If the source Redis is self-hosted, this parameter is left blank.
target_instance_spec_code	String	Specification code of the target instance.
error_message	String	Error message.
released_at	String	Time when the migration ECS is released.
version	String	Version.
resume_mode	String	Operation mode, which can be <b>auto</b> or <b>manual</b> .
supported_features	Array of strings	Supported features.

**Status code: 400**

**Table 4-162** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-163** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-164** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-165** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-166** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/666486c2d9b948c1b9ea57e714d744fa/migration-tasks?offset=0&limit=10&name=dc-migration-i9qk
```

## Example Responses

**Status code: 200**

Querying the migration task list.

```
{
  "count" : 1,
  "migration_tasks" : [ {
    "task_id" : "2944a563-6f27-4604-9c16-a9a53cd95cc7",
    "task_name" : "dcs-migration-test-6-16",
    "status" : "TERMINATED",
    "migration_type" : "online_migration",
    "migration_method" : "incremental_migration",
    "data_source" : "192.168.0.200:6379",
    "source_instance_name" : "migration-resource",
    "source_instance_id" : "132e0017-715b-4556-930a-95c7db7e8f7a",
    "target_instance_addr" : "192.168.0.153:6379",
    "target_instance_name" : "migration-target",
    "target_instance_id" : "eb1a8d1c-9ea6-4fcd-ac43-c3d3c2493f06",
    "created_at" : "2021-06-16T06:12:55.508Z",
    "description" : "dcs-test",
    "source_instance_status" : "RUNNING",
    "target_instance_status" : "RUNNING",
    "source_instance_subnet_id" : "192.168.0.1",
    "target_instance_subnet_id" : "192.168.0.2",
    "source_instance_spec_code" : "redis.single.xu1.tiny.128",
    "target_instance_spec_code" : "redis.single.xu1.tiny.128",
    "error_message" : null,
    "released_at" : "202404011057",
    "version" : "6.0.21",
    "resume_mode" : "auto",
    "supported_features" : [ ]
  } ]
}
```

## Status Codes

Status Code	Description
200	Querying the migration task list.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

### 4.6.3 Deleting Data Migration Tasks

#### Function

This API is used to delete data migration tasks.

#### URI

DELETE /v2/{project\_id}/migration-tasks/delete



**Table 4-167** Path Parameters

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

## Request Parameters

**Table 4-168** Request body parameters

Parameter	Mandatory	Type	Description
task_id_list	Yes	Array of strings	List of IDs of the migration tasks to be deleted.

## Response Parameters

**Status code: 200**

**Table 4-169** Response body parameters

Parameter	Type	Description
task_id_list	Array of strings	List of IDs of the migration tasks to be deleted.

**Status code: 400**

**Table 4-170** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-171** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-172** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-173** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-174** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Deleting data migration tasks

```
DELETE https://{dcs_endpoint}/v2/666486c2d9b948c1bba57e714d744fa/migration-tasks/delete
{
  "task_id_list" : [ "2fb6b7e2-5eb8-4380-9d60-ce8d12b19aca" ]
}
```

## Example Responses

**Status code: 200**

Data migration task deleted successfully.

```
{
  "task_id_list" : [ "2fb6b7e2-5eb8-4380-9d60-ce8d12b19aca" ]
}
```

## Status Codes

Status Code	Description
200	Data migration task deleted successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource does not exist. (No response. For details, see status code <b>200</b> .)
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.4 Querying Details of a Data Migration Task

### Function

This API is used to query migration task details.

### URI

GET /v2/{project\_id}/migration-task/{task\_id}

**Table 4-175** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-176** Response body parameters

Parameter	Type	Description
task_id	String	Migration task ID.
task_name	String	Migration task name.
description	String	Migration task description.

Parameter	Type	Description
status	String	Migration task status. The value can be <b>SUCCESS</b> , <b>FAILED</b> , <b>MIGRATING</b> , <b>TERMINATED</b> , <b>TERMINATING</b> , <b>INCRMIGRATING</b> , <b>FULLMIGRATING</b> , <b>RUNNING</b> (pending configuration), <b>MIGRATION_FAILED</b> , or <b>RELEASED</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>SUCCESS</b></li> <li>• <b>FAILED</b></li> <li>• <b>MIGRATING</b></li> <li>• <b>TERMINATED</b></li> <li>• <b>TERMINATING</b></li> <li>• <b>INCRMIGEATING</b></li> <li>• <b>FULLMIGRATING</b></li> <li>• <b>RUNNING</b></li> <li>• <b>MIGRATION_FAILED</b></li> <li>• <b>RELEASED</b></li> </ul>
migration_type	String	Migration mode, which can be backup file import or online migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>backupfile_import</b></li> <li>• <b>online_migration</b></li> </ul>
migration_method	String	Type of the migration, which can be full migration or incremental migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b></li> <li>• <b>incremental_migration</b></li> </ul>
ecs_tenant_private_ip	String	Private IP address of the migration ECS on the tenant side. This IP address can be added to the whitelist if it is in the same VPC as the private IP address of the target or source Redis.
backup_files	<b>BackupFilesBody</b> object	Backup files to be imported when the migration mode is backup file import.
network_type	String	Network type, which can be VPC or VPN. Enumeration values: <ul style="list-style-type: none"> <li>• <b>vpc</b></li> <li>• <b>vpn</b></li> </ul>
source_instance	<b>SourceInstanceBody</b> object	Source Redis information. This parameter is mandatory for online migration.

Parameter	Type	Description
target_instance	<a href="#">TargetInstanceBody</a> object	Target Redis instance information.
created_at	String	Time when the migration task is created.
updated_at	String	Time when the migration task is complete.
released_at	String	Time when the migration ECS is released.
version	String	Version.
resume_mode	String	Operation mode, which can be <b>auto</b> or <b>manual</b> .
supported_features	Array of strings	Supported features.
tenant_vpc_id	String	VPC ID.
tenant_subnet_id	String	Subnet ID.
tenant_security_group_id	String	Security group ID.
bandwidth_limit_mb	String	Maximum bandwidth.
task_status	String	Task status. <b>EXCHANGING</b> is returned only when IP addresses are being switched.

**Table 4-177** BackupFilesBody

Parameter	Type	Description
file_source	String	Data source, which can be an OBS bucket or a backup record. Enumeration values: <ul style="list-style-type: none"> <li>● <b>self_build_obs</b></li> <li>● <b>backup_record</b></li> </ul>
bucket_name	String	Name of the OBS bucket.
files	Array of <a href="#">Files</a> objects	List of backup files to be imported. This parameter is mandatory when the data source is an OBS bucket.
backup_id	String	Backup record ID. This parameter is mandatory when the data source is a backup record.

**Table 4-178** Files

Parameter	Type	Description
file_name	String	Name of a backup file.
size	String	File size in bytes.
update_at	String	Time when the file was last modified. The format is YYYY-MM-DD HH:MM:SS.

**Table 4-179** SourceInstanceBody

Parameter	Type	Description
addr	String	Source Redis address (specified in the <b>source_instance</b> parameter).
password	String	Redis password. If a password is set, this parameter is mandatory.
task_status	String	Task status.
id	String	Redis instance ID.
ip	String	Redis IP address.
port	String	Redis port.
name	String	Redis name.
proxy_multi_db	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.
db	String	Redis database.

**Table 4-180** TargetInstanceBody

Parameter	Type	Description
id	String	Redis instance ID (mandatory in the <b>target_instance</b> parameter).
name	String	Redis instance name (specified in the <b>target_instance</b> parameter).
password	String	Redis password. If a password is set, this parameter is mandatory.
task_status	String	Task status.
ip	String	Redis IP address.
port	String	Redis port.

Parameter	Type	Description
addr	String	Redis instance address.
proxy_multi_db	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.
db	String	Redis database.

**Status code: 400**

**Table 4-181** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-182** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**



**Table 4-183** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-184** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-185** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/254d2280acb74d36a8b839746bcd7352 /migration-task/a276c1ffa0a54c2597fc824b917db317
```

## Example Responses

**Status code: 200**

Details of a data migration task queried successfully.

```
{
  "task_name": "migration1",
  "task_id": "a276c1ffa0a54c2597fc824b917db317",
  "status": "TERMINATING",
  "migration_type": "incremental_migration",
  "network_type": "vpc",
  "source_instance": {
    "addr": "192.168.1.2:6379",
    "id": "86157b69-8a62-47f9-8c55-fa6ddc8927e1",
    "name": "dcs-test",
    "ip": "192.168.1.2",
    "port": "6379",
    "proxy_multi_db": false,
    "password": "DCStest123",
    "task_status": "RUNNING",
    "db": "0"
  },
  "target_instance": {
    "addr": "192.168.1.2:6379",
    "id": "86157b69-8a62-47f9-8c55-fa6ddc8927ee",
    "name": "test-instance",
    "ip": "192.168.1.2",
    "port": "6379",
    "proxy_multi_db": false,
    "password": "DCStest123",
    "task_status": "RUNNING",
    "db": "0"
  },
  "created_at": "2019/10/22 14:44:30",
  "updated_at": "2019/10/22 18:00:00"
}
```

## Status Codes

Status Code	Description
200	Details of a data migration task queried successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.5 Stopping a Data Migration Task

### Function

This API is used to stop a data migration task.

### URI

POST /v2/{project\_id}/migration-task/{task\_id}/stop

**Table 4-186** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-187** Response body parameters

Parameter	Type	Description
task_id	String	Migration task ID.
task_name	String	Migration task name.
description	String	Migration task description.

Parameter	Type	Description
status	String	Migration task status. The value can be <b>SUCCESS</b> , <b>FAILED</b> , <b>MIGRATING</b> , <b>TERMINATED</b> , <b>TERMINATING</b> , <b>INCRMIGRATING</b> , <b>FULLMIGRATING</b> , <b>RUNNING</b> (pending configuration), <b>MIGRATION_FAILED</b> , or <b>RELEASED</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>SUCCESS</b></li> <li>• <b>FAILED</b></li> <li>• <b>MIGRATING</b></li> <li>• <b>TERMINATED</b></li> <li>• <b>TERMINATING</b></li> <li>• <b>INCRMIGEATING</b></li> <li>• <b>FULLMIGRATING</b></li> <li>• <b>RUNNING</b></li> <li>• <b>MIGRATION_FAILED</b></li> <li>• <b>RELEASED</b></li> </ul>
migration_type	String	Migration mode, which can be backup file import or online migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>backupfile_import</b></li> <li>• <b>online_migration</b></li> </ul>
migration_method	String	Type of the migration, which can be full migration or incremental migration. Enumeration values: <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b></li> <li>• <b>incremental_migration</b></li> </ul>
ecs_tenant_private_ip	String	Private IP address of the migration ECS on the tenant side. This IP address can be added to the whitelist if it is in the same VPC as the private IP address of the target or source Redis.
backup_files	<b>BackupFilesBody</b> object	Backup files to be imported when the migration mode is backup file import.
network_type	String	Network type, which can be VPC or VPN. Enumeration values: <ul style="list-style-type: none"> <li>• <b>vpc</b></li> <li>• <b>vpn</b></li> </ul>
source_instance	<b>SourceInstanceBody</b> object	Source Redis information. This parameter is mandatory for online migration.

Parameter	Type	Description
target_instance	<a href="#">TargetInstanceBody</a> object	Target Redis instance information.
created_at	String	Time when the migration task is created.
updated_at	String	Time when the migration task is complete.
released_at	String	Time when the migration ECS is released.
version	String	Version.
resume_mode	String	Operation mode, which can be <b>auto</b> or <b>manual</b> .
supported_features	Array of strings	Supported features.
tenant_vpc_id	String	VPC ID.
tenant_subnet_id	String	Subnet ID.
tenant_security_group_id	String	Security group ID.
bandwidth_limit_mb	String	Maximum bandwidth.
task_status	String	Task status. <b>EXCHANGING</b> is returned only when IP addresses are being switched.

**Table 4-188** BackupFilesBody

Parameter	Type	Description
file_source	String	Data source, which can be an OBS bucket or a backup record. Enumeration values: <ul style="list-style-type: none"> <li>• <b>self_build_obs</b></li> <li>• <b>backup_record</b></li> </ul>
bucket_name	String	Name of the OBS bucket.
files	Array of <a href="#">Files</a> objects	List of backup files to be imported. This parameter is mandatory when the data source is an OBS bucket.
backup_id	String	Backup record ID. This parameter is mandatory when the data source is a backup record.

**Table 4-189** Files

Parameter	Type	Description
file_name	String	Name of a backup file.
size	String	File size in bytes.
update_at	String	Time when the file was last modified. The format is YYYY-MM-DD HH:MM:SS.

**Table 4-190** SourceInstanceBody

Parameter	Type	Description
addr	String	Source Redis address (specified in the <b>source_instance</b> parameter).
password	String	Redis password. If a password is set, this parameter is mandatory.
task_status	String	Task status.
id	String	Redis instance ID.
ip	String	Redis IP address.
port	String	Redis port.
name	String	Redis name.
proxy_multi_db	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.
db	String	Redis database.

**Table 4-191** TargetInstanceBody

Parameter	Type	Description
id	String	Redis instance ID (mandatory in the <b>target_instance</b> parameter).
name	String	Redis instance name (specified in the <b>target_instance</b> parameter).
password	String	Redis password. If a password is set, this parameter is mandatory.
task_status	String	Task status.
ip	String	Redis IP address.
port	String	Redis port.

Parameter	Type	Description
addr	String	Redis instance address.
proxy_multi_db	Boolean	Indicates whether multi-DB is enabled for Proxy Cluster DCS instances.
db	String	Redis database.

**Status code: 400**

**Table 4-192** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-193** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-194** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-195** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-196** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>



## Example Requests

```
POST https://{dcs_endpoint}/v2/666486c2d9b948c1bbea57e714d744fa/migration-task/  
2fb6b7e2-5eb8-4380-9d60-ce8d12b19aca/stop
```

## Example Responses

**Status code: 200**

Data migration task stopped successfully.

```
{  
  "task_name": "migration1",  
  "task_id": "a276c1ffa0a54c2597fc824b917db317",  
  "status": "TERMINATING",  
  "migration_type": "incremental_migration",  
  "network_type": "vpc",  
  "source_instance": {  
    "addr": "192.168.1.2:6379",  
    "id": "86157b69-8a62-47f9-8c55-fa6ddc8927e1",  
    "name": "dcs-test",  
    "ip": "192.168.1.2",  
    "port": "6379",  
    "proxy_multi_db": false,  
    "password": "DCStest123",  
    "task_status": "RUNNING",  
    "db": "0"  
  },  
  "target_instance": {  
    "addr": "192.168.1.2:6379",  
    "id": "86157b69-8a62-47f9-8c55-fa6ddc8927ee",  
    "name": "test-instance",  
    "ip": "192.168.1.2",  
    "port": "6379",  
    "proxy_multi_db": false,  
    "password": "DCStest123",  
    "task_status": "RUNNING",  
    "db": "0"  
  },  
  "created_at": "2019/10/22 14:44:30",  
  "updated_at": "2019/10/22 18:00:00"  
}
```

## Status Codes

Status Code	Description
200	Data migration task stopped successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.6 Querying the Progress of an Online Migration Task

### Function

This API is used to query progress details about an online migration task.

### URI

GET /v2/{project\_id}/migration-task/{task\_id}/stats

**Table 4-197** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-198** Response body parameters

Parameter	Type	Description
full_migration_progress	String	Percentage of the full migration progress.
offset	String	Offset of incremental migration, which is the difference between the data volume of the source Redis and the target Redis during the incremental migration. If the offset is 0, there is no data difference between the source and the target Redis during the incremental migration.
source_dbsize	String	Number of keys in the source Redis.
target_dbsize	String	Number of keys in the target Redis.
target_input_kbps	String	Key write traffic of the target Redis, in KB/s.

Parameter	Type	Description
target_ops	String	Number of concurrent operations per second on the target Redis.
is_migrating	Boolean	Whether the migration task is in progress.

**Status code: 400**

**Table 4-199** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-200** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-201** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404****Table 4-202** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500****Table 4-203** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
https://{dcs_endpoint}/v2/666486c2d9b948c1bba57e714d744fa/migration-task/31c6fd2b-2893-430b-90ff-d1adb8060585/stats
```

## Example Responses

### Status code: 200

Progress of the online migration task queried successfully.

```
{
  "full_migration_progress" : 100,
  "offset" : 100,
  "source_dbsize" : 531221,
  "target_dbsize" : 531211,
  "target_input_kbps" : 50,
  "target_ops" : 5300,
  "is_migrating" : true
}
```

### Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4133",
  "error_msg" : "Instance job is not found."
}
```

## Status Codes

Status Code	Description
200	Progress of the online migration task queried successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.7 Creating an Online Data Migration Task

### Function

This API is used to create an online data migration task.

## URI

POST /v2/{project\_id}/migration/instance

**Table 4-204** Path Parameters

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

## Request Parameters

**Table 4-205** Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the online migration task.
description	No	String	Description of the online migration task.
vpc_id	Yes	String	VPC ID. To obtain it, do as follows: <ul style="list-style-type: none"> <li>Method 1: Log in to the VPC console and view the VPC ID in the VPC details.</li> <li>Method 2: Call the VPC API. For details, see the API for querying VPCs.</li> </ul>
subnet_id	Yes	String	Network ID of the subnet. To obtain it, do as follows: <ul style="list-style-type: none"> <li>Method 1: Log in to VPC console and click the target subnet on the <b>Subnets</b> tab page. You can view the network ID on the displayed page.</li> <li>Method 2: Call the VPC API. For details, see the API for querying subnets.</li> </ul>

Parameter	Mandatory	Type	Description
security_group_id	Yes	String	<p>Security group which the instance belongs to. A security group implements access control for VMs within a security group or in different security groups, enhancing VM security. You can define different access rules for a security group to protect the VMs that are added to this security group.</p> <p>To obtain it, do as follows:</p> <ul style="list-style-type: none"> <li>• Method 1: Log in to the VPC console and choose <b>Access Control &gt; Security Groups</b>. You can create and configure a security group, and obtain the security group ID.</li> <li>• Method 2: Call the API used to query security group details. For details, see the API for querying security group details.</li> </ul>

## Response Parameters

Status code: 200

Table 4-206 Response body parameters

Parameter	Type	Description
instance_id	String	Online migration task ID.

Status code: 400

Table 4-207 Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-208** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-209** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**



**Table 4-210** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-211** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Creating an online migration task and configuring the VPC, subnet, and security group for the migration ECS

```
POST https://{dcs_endpoint}/v2/{project_id}/migration/instance
```

```
{
  "name": "dcs-migration-thrc",
  "description": "Creating an online data migration task",
  "vpc_id": "5e37b3be-950a-48e1-b498-65b63d336481",
  "subnet_id": "40f15ed6-7f85-49d5-ba0e-65b940d4812c",
  "security_group_id": "9df96622-24b7-4813-84b8-ab74552a21d7"
}
```

## Example Responses

**Status code: 200**

Online data migration task created.

```
{  
  "instance_id" : "b21989ec-2889-4b8e-99db-19c073425ec2"  
}
```

## Status Codes

Status Code	Description
200	Online data migration task created.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.8 Configuring an Online Data Migration Task

### Function

This API is used to configure an online data migration task.

### URI

POST /v2/{project\_id}/migration/{task\_id}/task

**Table 4-212** Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see <a href="#">Obtaining a Project ID</a> .
task_id	Yes	String	Online migration task ID.

## Request Parameters

**Table 4-213** Request body parameters

Parameter	Mandatory	Type	Description
migration_method	Yes	String	<p>Type of the migration.</p> <ul style="list-style-type: none"> <li>• Full migration is suitable for scenarios where services can be interrupted. Data is migrated at one time. Source instance data updated during the migration will not be migrated to the target instance.</li> <li>• Incremental migration is suitable for scenarios requiring minimal service downtime. The incremental migration parses logs to ensure data consistency between the source and target instances. After the full migration is complete, incremental migration starts. Options: <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b>: full migration</li> <li>• <b>incremental_migration</b>: incremental migration</li> </ul> </li> </ul> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>• <b>full_amount_migration</b></li> <li>• <b>incremental_migration</b></li> </ul>

Parameter	Mandatory	Type	Description
resume_mode	Yes	String	<p>Reconnection mode. In automatic reconnection mode, if the source and target instances are disconnected due to network exceptions, automatic reconnections will be performed indefinitely. Full synchronization will be triggered and requires more bandwidth if incremental synchronization becomes unavailable. Exercise caution when enabling this option. Values:</p> <ul style="list-style-type: none"> <li>● <b>auto</b>: automatically reconnect.</li> <li>● <b>manual</b>: manually reconnect.</li> </ul> <p>Enumeration values:</p> <ul style="list-style-type: none"> <li>● <b>auto</b></li> <li>● <b>manual</b></li> </ul>
bandwidth_limit_mb	No	String	<p>Bandwidth limit. For incremental migration, you can limit the bandwidth to ensure smooth service running. When the data synchronization speed reaches the limit, it can no longer increase. - Unit: MB/s. - Value range: 1-10,240 (an integer greater than 0 and less than 10,241).</p>
source_instance	Yes	<a href="#">ConfigMigrationInstanceBody</a> object	Source Redis information.
target_instance	Yes	<a href="#">ConfigMigrationInstanceBody</a> object	Target Redis information.

**Table 4-214** ConfigMigrationInstanceBody

Parameter	Mandatory	Type	Description
id	No	String	Redis instance ID (mandatory if the source Redis address is not specified).
addr	No	String	Source Redis address (mandatory if the Redis instance ID is not specified).
password	No	String	Redis password. If a password is set, this parameter is mandatory.

## Response Parameters

**Status code: 200**

**Table 4-215** Response body parameters

Parameter	Type	Description
id	String	Migration task ID.
name	String	Migration task name.
status	String	Migration status. Options: <b>SUCCESS, FAILED, MIGRATING, TERMINATED</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>SUCCESS</b></li> <li>• <b>FAILED</b></li> <li>• <b>MIGRATING</b></li> <li>• <b>TERMINATED</b></li> </ul>
error	String	Error message.

**Status code: 400**

**Table 4-216** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-217** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-218** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-219** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-220** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Configuring an online migration task with migration type set to incremental, auto-reconnect enabled, and source and target instances configured

POST https://{dcs\_endpoint}/v2/{project\_id}/migration/{task\_id}/task

```
{
  "migration_method" : "incremental_migration",
  "bandwidth_limit_mb" : 123,
  "resume_mode" : "auto",
  "source_instance" : {
    "id" : null,
    "addr" : "192.168.1.1:6379,192.168.0.0:6379",
    "password" : "xxxxxx"
  },
  "target_instance" : {
    "id" : "cf4a05df-1c38-47c5-bb5a-0a7b3673b3bd",
    "addr" : null,
    "password" : null
  }
}
```

## Example Responses

### Status code: 200

Online data migration task configured.

```
{
  "id" : "90754308-a156-406f-a837-8f852f38a646",
  "name" : "dcs-migration-1db7",
  "status" : "FULLMIGRATING",
  "error" : ""
}
```

## Status Codes

Status Code	Description
200	Online data migration task configured.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.6.9 Stopping Data Migration Tasks

### Function

This API is used to stop data migration tasks in batches. If a success response is returned, the request is successfully delivered. The migration tasks are stopped only when their status is **TERMINATED**.

### URI

POST /v2/{project\_id}/migration-task/batch-stop

**Table 4-221** Path Parameters

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



## Request Parameters

**Table 4-222** Request body parameters

Parameter	Mandatory	Type	Description
migration_tasks	Yes	Array of strings	Data migration task list.

## Response Parameters

**Status code: 200**

**Table 4-223** Response body parameters

Parameter	Type	Description
migration_tasks	Array of <a href="#">StopMigrationTaskResult</a> objects	Data migration task list.

**Table 4-224** StopMigrationTaskResult

Parameter	Type	Description
result	String	Result of delivering the request for stopping migration tasks. Enumeration values: <ul style="list-style-type: none"> <li>• <b>success</b></li> <li>• <b>failed</b></li> </ul>
task_id	String	ID of the data migration task.

**Status code: 400**

**Table 4-225** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-226** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-227** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-228** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-229** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Stopping data migration tasks in batches

```
POST https://{dcs_endpoint}/v2/{project_id}/migration-task/batch-stop
{
  "migration_tasks": [ "b21989ec-2889-4b8e-99db-19c073425ec2", "5130d57f-640a-435b-
bc3a-0fb1860a5340" ]
}
```

## Example Responses

**Status code: 200**

"Migration tasks are being stopped."

 **NOTE**

The migration tasks are stopped when their status is **TERMINATED**.

```
{
  "migration_tasks": [ {
```

```
"result" : "success",  
"task_id" : "b21989ec-2889-4b8e-99db-19c073425ec2"  
}, {  
"result" : "failed",  
"task_id" : "5130d57f-640a-435b-bc3a-0fb1860a5340"  
}]  
}
```

**Status code: 400**

Invalid request.

```
{  
"error_msg" : "invalid migration task id in the request.",  
"error_code" : "DCS.4855"  
}
```

## Status Codes

Status Code	Description
200	"Migration tasks are being stopped." <b>NOTE</b> The migration tasks are stopped when their status is <b>TERMINATED</b> .
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.7 Log Management

### 4.7.1 Querying the Slow Log

#### Function

This API is used to query slow logs.

#### URI

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

**Table 4-230** Path Parameters

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

**Table 4-231** Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Offset, which is the position where the query starts. The value must be no less than 0.
limit	No	Integer	Number of items displayed on each page.
sort_key	No	String	Specifies the keyword based on which the return results are sorted. The value can be <b>start_time</b> or <b>duration</b> . The default value is <b>start_time</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>start_time</b></li> <li>• <b>duration</b></li> </ul>
sort_dir	No	String	Result sorting order. The value can be <b>desc</b> (descending order) or <b>asc</b> (ascending order). The default value is <b>desc</b> . Enumeration values: <ul style="list-style-type: none"> <li>• <b>desc</b></li> <li>• <b>asc</b></li> </ul>
start_time	Yes	String	Query start time (UTC). Example: <b>1598803200000</b> .
end_time	Yes	String	Query end time (UTC). Example: 1599494399000.

## Request Parameters

None

## Response Parameters

**Status code: 200**

**Table 4-232** Response body parameters

Parameter	Type	Description
total_num	Integer	Total number of slow logs.
count	Integer	Total.
slowlogs	Array of <a href="#">SlowlogItem</a> objects	Slow log list.

**Table 4-233** SlowlogItem

Parameter	Type	Description
id	Integer	Unique ID of a slow log.
command	String	Slow command.
start_time	String	Execution start time. Example: <b>2020-06-19T07:06:07Z</b> .
duration	String	Duration, in ms.
shard_name	String	Name of the shard where the slow command is executed. This parameter is supported only when the instance type is cluster.
database_id	Integer	Database ID, which is available only to some customers.
username	String	Account name that can operate slow logs. This parameter is available only to designated customers.

**Status code: 400**

**Table 4-234** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-235** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-236** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-237** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-238** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

### Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-
cebf-4473-95c4-d1b573c16e79/slowlog?start_time=1598803200000&end_time=1599494399000
```

### Example Responses

**Status code: 200**

Slow logs queried successfully.

```
{
  "total_num" : 1,
  "count" : 1,
  "slowlogs" : [ {
    "id" : 1,
    "start_time" : "2020-06-19T07:06:07Z",
    "command" : "SLOWLOG GET 128",
    "duration" : "17",
    "shard_name" : "group-0",
    "database_id" : 1,
    "username" : "default"
  } ]
}
```

**Status code: 400**

Invalid request.

```
{
  "error_code" : "DCS.4800",
  "error_msg" : "Invalid start_time in the request."
}
```

### Status Codes

Status Code	Description
200	Slow logs queried successfully.



Status Code	Description
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

# 4.8 Background Task Management

## 4.8.1 Listing Background Tasks

### Function

This API is used to query background tasks.

### URI

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

**Table 4-239** Path Parameters

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

**Table 4-240** 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 items displayed on each page.

Parameter	Mandatory	Type	Description
start_time	No	String	Query start time (UTC). Format: yyyyMMddHHmmss, for example, <b>20200609160000</b> .
end_time	No	String	Query end time (UTC). Format: yyyyMMddHHmmss, for example, <b>20200617155959</b> .

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-241** Response body parameters

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

**Table 4-242** SingleBackgroundTask

Parameter	Type	Description
id	String	Background task ID.

Parameter	Type	Description
name	String	Background task name. The options are as follows: <b>EXTEND</b> : modifying specifications <b>BindEip</b> : enabling public access <b>UnBindEip</b> : disabling public access <b>AddReplica</b> : adding replicas <b>DelReplica</b> : deleting replicas <b>AddWhitelist</b> : configuring an IP whitelist <b>UpdatePort</b> : changing the port <b>RemoveIpFromDns</b> : removing IP addresses <b>masterStandbySwapJob</b> : master/standby switchover <b>modify</b> : changing the password
details	<b>DetailsBody</b> object	Details.
user_name	String	Username.
user_id	String	User ID.
params	String	Task parameters.
status	String	Task status.
created_at	String	Task start time, in the format 2020-06-17T07:38:42.503Z.
updated_at	String	Task end time, in the format 2020-06-17T07:38:42.503Z.
enable_show	Boolean	Task details that can be expanded.

**Table 4-243** DetailsBody

Parameter	Type	Description
old_capacity	String	Capacity before the modification. This parameter has a value only when the specifications are modified.
new_capacity	String	Capacity after the modification. This parameter has a value only when the specifications are modified.
enable_public_ip	Boolean	Whether to enable public access. This parameter has a value only when public access is enabled.

Parameter	Type	Description
public_ip_id	String	ID of the IP address used for public access. This parameter has a value only when public access is enabled.
public_ip_address	String	IP address used for public access. This parameter has a value only when public access is enabled.
enable_ssl	Boolean	Whether to enable SSL. This parameter has a value only when SSL is enabled.
old_cache_mode	String	Cache type before the modification. This parameter has a value only when the specifications are modified.
new_cache_mode	String	Cache type after the modification. This parameter has a value only when the specifications are modified.
old_resource_spec_code	String	Specification parameter before the modification. This parameter has a value only when the specifications are modified.
new_resource_spec_code	String	Specification parameter after the modification. This parameter has a value only when the specifications are modified.
old_replica_num	Integer	Number of replicas before the modification. This parameter has a value only when the specifications are modified.
new_replica_num	Integer	Number of replicas after the modification. This parameter has a value only when the specifications are modified.
old_cache_type	String	Cache type before the modification. This parameter has a value only when the specifications are modified.
new_cache_type	String	Specification type after the modification. This parameter has a value only when the specifications are modified.
replica_ip	String	Replica IP address.
replica_az	String	AZ where the replica is in.
group_name	String	Group name.
old_port	Integer	Old port.
new_port	Integer	New port.
is_only_adjust_charging	Boolean	Indicates whether to only change the billing mode.

Parameter	Type	Description
account_name	String	Account name.
source_ip	String	Source IP address.
target_ip	String	Target IP address.
node_name	String	Node information.
rename_commands	Array of strings	Renamed command.
updated_config_length	Integer	Length of the updated configuration item.

**Status code: 400**

**Table 4-244** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-245** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-246** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-247** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-248** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-
cebf-4473-95c4-d1b573c16e79/tasks?
offset=0&limit=10&begin_time=20200609160000&end_time=20200617155959
```

## Example Responses

**Status code: 200**

Background tasks listed successfully.

```
{
  "task_count" : 1,
  "tasks" : [ {
    "id" : "8abf6e1e72c12e7c0172c15b508500aa",
    "name" : "EXTEND",
    "user_name" : "dcs_000_02",
    "user_id" : "d53977d1adfb49c5b025ba7d33a13fd7",
    "details" : {
      "old_cache_mode" : "single",
      "new_cache_mode" : "single",
      "old_capacity" : "0.125",
      "new_capacity" : "0.25",
      "old_resource_spec_code" : "redis.single.xu1.tiny.125",
      "new_resource_spec_code" : "redis.single.xu1.tiny.256",
      "old_replica_num" : 1,
      "new_replica_num" : 1,
      "old_cache_type" : "single",
      "new_cache_type" : "single",
      "replica_ip" : "192.192.0.1",
      "replica_az" : "az01",
      "group_name" : "group1",
      "old_port" : 6379,
      "new_port" : 6379,
      "is_only_adjust_charging" : false,
      "account_name" : "account1",
      "source_ip" : "192.192.0.0",
      "target_ip" : "192.192.0.1",
      "node_name" : "node1",
      "rename_commands" : [ ],
      "updated_config_length" : 0
    },
    "enable_show" : false,
    "status" : "SUCCESS",
    "created_at" : "2020-06-17T08:18:06.597Z",
    "updated_at" : "2020-06-17T08:18:10.106Z"
  } ]
}
```

## Status Codes

Status Code	Description
200	Background tasks listed successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.

Status Code	Description
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.8.2 Deleting a Background Task

### Function

Deleting a background task.

### URI

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

**Table 4-249** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-250** Response body parameters

Parameter	Type	Description
message	String	Returned message.

**Status code: 400**



**Table 4-251** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-252** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-253** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-254** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-255** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

Deleting a background task.

```
DELETE https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-
cebf-4473-95c4-d1b573c16e79/tasks/8abf6e1e72c12e7c0172c15b508500aa
```

## Example Responses

**Status code: 200**

Background task deleted successfully.

```
{
  "message" : ""
}
```

## Status Codes

Status Code	Description
200	Background task deleted successfully.
204	Background task deleted successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.8.3 Querying Background Task Details

### Function

This API is used to query details about a background task.

### URI

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

**Table 4-256** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-257** Response body parameters

Parameter	Type	Description
progress	Integer	Overall progress (unit: %).
remain_time	Integer	Remaining time, in seconds.
step_details	Array of <a href="#">StepDetail</a> objects	Task details list.

**Table 4-258** StepDetail

Parameter	Type	Description
step_id	String	Background task ID.
step_name	String	Task name. Maximum: <b>1024</b>
step_status	String	Task status. Options: <ul style="list-style-type: none"> <li>● <b>FINISH</b>: The task has completed.</li> <li>● <b>FAILED</b>: The job fails to be executed.</li> <li>● <b>EXECUTING</b>: The task is being executed.</li> <li>● <b>WAITING</b>: The job is awaiting.</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>FINISH</b></li> <li>● <b>FAILED</b></li> <li>● <b>EXECUTING</b></li> <li>● <b>WAITING</b></li> </ul>
begin_time	String	Task start time, in the format 2020-06-17T07:38:42.503Z.
end_time	String	Task end time, in the format 2020-06-17T07:38:42.503Z.
error_code	String	Error code.
sub_step_details	Array of <a href="#">SubStepDetail</a> objects	Subtask list.

**Table 4-259** SubStepDetail

Parameter	Type	Description
sub_step_id	String	Task ID.

Parameter	Type	Description
sub_step_name	String	Task name. Maximum: <b>1024</b>
sub_step_status	String	Task status.
begin_time	String	Task start time, in the format 2020-06-17T07:38:42.503Z.
end_time	String	Task end time, in the format 2020-06-17T07:38:42.503Z.
detail	String	Additional attribute details of a subtask. Maximum: <b>1024</b>
error_code	String	Error code.

**Status code: 400**

**Table 4-260** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-261** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-262** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-263** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-264** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-cebf-4473-95c4-d1b573c16e79/tasks/8abf6e1e72c12e7c0172c15b508500aa/progress
```

## Example Responses

**Status code: 200**

Details of the background task queried successfully.

```
{
  "progress": 30,
  "remain_time": 100,
  "step_details": [ {
    "step_id": "9d1d1da8-650e-406f-81e4-b3c11515869f",
    "step_name": "Pre-check.",
    "step_status": "FINISH",
    "begin_time": "2022-09-01 11:52:24",
    "end_time": "2022-09-01 11:52:29",
    "error_code": "DCS.4064",
    "sub_step_details": [ {
      "sub_step_id": "4692b05b-fa55-4f7d-9be6-527bde25b424",
      "sub_step_name": "Resource check.",
      "sub_step_status": "FINISH",
      "begin_time": "2022-09-01 11:52:24",
      "end_time": "2022-09-01 11:52:26",
      "detail": "",
      "error_code": "DCS.4065"
    }, {
      "sub_step_id": "4692b05b-fa55-4f7d-9be6-527bde25b425",
      "sub_step_name": "Instance status check.",
      "sub_step_status": "FINISH",
      "begin_time": "2022-09-01 11:52:26",
      "end_time": "2022-09-01 11:52:29",
      "detail": "",
      "error_code": "DCS.4064"
    }
  ]
}, {
  "step_id": "9d1d1da8-650e-406f-3fad-c4a22515869f",
  "step_name": "Data migration.",
  "step_status": "EXECUTING",
  "begin_time": "2022-09-01 11:52:30",
  "end_time": "2022-09-01 11:54:30",
  "error_code": "DCS.4065",
  "sub_step_details": [ {
    "sub_step_id": "cb58a8ea-b8e2-4626-b3fa-57ab1a830724",
    "sub_step_name": "Resource request.",
```

```

"sub_step_status": "FINISH",
"begin_time": "2022-09-01 11:52:30",
"end_time": "2022-09-01 11:53:30",
"detail": "{node_id:9996c3376318417281fb5e611f3fb1a0,slot_range:[0 5460],full_migration:in
progress,inc_migration:in progress}",
"error_code": "DCS.4065"
}, {
"sub_step_id": "f9df7fd2-b31f-4ec3-bbb1-3dc740326342",
"sub_step_name": "Resource request.",
"sub_step_status": "FINISH",
"begin_time": "2022-09-01 11:53:30",
"end_time": "2022-09-01 11:54:30",
"detail": "{node_id:5b70f440ccc94789b34a5c98c2ba05ea,slot_range:[5461 10921],full_migration:to
start,inc_migration:to start}",
"error_code": "DCS.4066"
}]
}]
}

```

## Status Codes

Status Code	Description
200	Details of the background task queried successfully.
400	Invalid request.
401	Invalid authentication information.
403	Request rejected.
404	The requested resource could not be found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.8.4 Querying the Job Execution Result of a Tenant

### Function

This API is used to query the task execution result.

### URI

GET /v2/{project\_id}/jobs/{job\_id}

**Table 4-265** Path Parameters

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



Parameter	Mandatory	Type	Description
job_id	Yes	String	Task ID.

## Request Parameters

None

## Response Parameters

Status code: 200

Table 4-266 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
job_type	String	Job type. Options: <ul style="list-style-type: none"> <li>• <b>masterStandbySwapJob</b>: switching master and standby nodes</li> <li>• <b>modifyClientIpTransJob</b>: modifying source IP pass-through</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>• <b>masterStandbySwapJob</b></li> <li>• <b>modifyClientIpTransJob</b></li> </ul>
status	String	Job status. Enumeration values: <ul style="list-style-type: none"> <li>• <b>INIT</b></li> <li>• <b>RUNNING</b></li> <li>• <b>SUCCESS</b></li> <li>• <b>FAIL</b></li> </ul>
begin_time	String	Job start timestamp, in ms. The format is 1684191545379.
end_time	String	Job start timestamp, in ms. The format is 1684191548248.
fail_reason	String	Failure cause.

Status code: 400

**Table 4-267** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 401**

**Table 4-268** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 403**

**Table 4-269** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 404**

**Table 4-270** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-271** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-
cebf-4473-95c4-d1b573c16e79/tasks/8abf6e1e72c12e7c0172c15b508500aa/progress
```

## Example Responses

**Status code: 200**

Details of the background task queried successfully.

```
{
  "job_id": "ff8080818822bbf70188235afc24141a",
  "job_type": "masterStandbySwapJob",
  "status": "SUCCESS",
  "begin_time": "1684191545379",
  "end_time": "1684191548248",
  "fail_reason": null
}
```

**Status code: 400**

Invalid request.

```
{
  "error_code" : "111400063",
  "error_msg" : "Invalid {0} parameter in the request."
}
```

## Status Codes

Status Code	Description
200	Details of the background task queried successfully.
400	Invalid request.
401	Invalid authentication information.
403	Request rejected.
404	The requested resource could not be found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

# 4.9 Other APIs

## 4.9.1 Querying Product Flavors

### Function

This API is used to query the product flavor (parameter **spec\_code**) required for configuring a new DCS instance. If no search criterion is specified, all product specifications will be queried by default.

### URI

GET /v2/{project\_id}/flavors

**Table 4-272** Path Parameters

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

**Table 4-273** Query Parameters

Parameter	Mandatory	Type	Description
spec_code	No	String	Product flavor.
cache_mode	No	String	DCS instance type. Options: <ul style="list-style-type: none"> <li>● <b>single</b>: single-node</li> <li>● <b>ha</b>: master/standby</li> <li>● <b>cluster</b>: Redis Cluster</li> <li>● <b>proxy</b>: Proxy Cluster</li> </ul>
engine	No	String	Cache engine. Options: <ul style="list-style-type: none"> <li>● Redis</li> </ul>
engine_version	No	String	Cache engine version. If the cache engine is Redis, the options are as follows: <ul style="list-style-type: none"> <li>● <b>3.0</b></li> <li>● <b>4.0</b></li> <li>● <b>5.0</b></li> <li>● <b>6.0</b></li> </ul>
cpu_type	No	String	CPU architecture. The options are as follows: <ul style="list-style-type: none"> <li>● <b>x86_64</b>: x86 architecture</li> <li>● <b>aarch64</b>: Arm architecture</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>x86_64</b></li> <li>● <b>aarch64</b></li> </ul>
capacity	No	String	Cache capacity (GB). <ul style="list-style-type: none"> <li>● For a single-node or master/standby DCS Redis 3.0 instance, the value can be <b>2, 4, 8, 16, 32, or 64</b>. For a Proxy Cluster DCS Redis instance, the value can be <b>64, 128, 256, 512, or 1024</b>.</li> <li>● For a single-node or master/standby DCS Redis 4.0/5.0/6.0 instance, the value can be <b>0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 32, or 64</b>. For a cluster instance, the value can be <b>4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024</b>.</li> </ul>

## Request Parameters

None

## Response Parameters

Status code: 200

**Table 4-274** Response body parameters

Parameter	Type	Description
flavors	Array of <a href="#">FlavorsItems</a> objects	Product flavor details.

**Table 4-275** FlavorsItems

Parameter	Type	Description
spec_code	String	Product flavor.
cloud_service_type_code	String	Code of the cloud service type.
cloud_resource_type_code	String	Code of the cloud resource type.
cache_mode	String	DCS instance type. Options: <ul style="list-style-type: none"> <li>● <b>single</b>: single-node</li> <li>● <b>ha</b>: master/standby</li> <li>● <b>cluster</b>: Redis Cluster</li> <li>● <b>proxy</b>: Proxy Cluster</li> </ul>
engine	String	Cache engine.
engine_version	String	Cache engine version. If the cache engine is Redis, the value can be <b>3.0</b> , <b>4.0</b> , <b>5.0</b> , or <b>6.0</b> .
product_type	String	Edition of DCS for Redis. Value: <b>generic</b> : basic edition
cpu_type	String	CPU architecture. The options are as follows: <ul style="list-style-type: none"> <li>● <b>x86_64</b>: x86 architecture</li> <li>● <b>aarch64</b>: Arm architecture</li> </ul>
storage_type	String	Storage type. Currently, only the following value is supported: <b>DRAM</b> : in-memory storage

Parameter	Type	Description
capacity	Array of strings	Cache capacity (GB).
billing_mode	Array of strings	Billing mode. The value can be: <ul style="list-style-type: none"> <li>• <b>Hourly</b>: pay-per-use</li> </ul>
tenant_ip_count	Integer	Number of tenant IP addresses.
pricing_type	String	Pricing type. The options are as follows: <ul style="list-style-type: none"> <li>• <b>tier</b>: Tiered pricing. One flavor corresponds to multiple capacity options.</li> <li>• <b>normal</b>: One flavor corresponds to one capacity option.</li> </ul>
is_dec	Boolean	Whether Dedicated Cloud (DeC) is supported.
attrs	Array of <a href="#">AttrObject</a> objects	Other information about the flavor.
flavors_available_zones	Array of <a href="#">FlavorAzObject</a> objects	AZs where there are available resources.
replica_count	Integer	Replicas.

**Table 4-276** AttrObject

Parameter	Type	Description
capacity	String	Cache capacity (GB).

Parameter	Type	Description
name	String	Additional information items. The options are as follows: <ul style="list-style-type: none"> <li>• <b>sharding_num</b>: Number of shards supported by the flavor.</li> <li>• <b>proxy_num</b>: Number of proxies supported by Proxy Cluster instances of the specified flavor. If the instance is not a Proxy Cluster instance, the value of this parameter is <b>0</b>.</li> <li>• <b>db_number</b>: Number of DBs of the flavor.</li> <li>• <b>max_memory</b>: Maximum available memory.</li> <li>• <b>max_connections</b>: Maximum number of connections supported by the flavor.</li> <li>• <b>max_clients</b>: Maximum number of clients supported by the flavor, which is usually equal to the maximum number of connections.</li> <li>• <b>max_bandwidth</b>: Maximum bandwidth supported by the flavor.</li> <li>• <b>max_in_bandwidth</b>: Maximum inbound bandwidth supported by the flavor, which is usually equal to the maximum bandwidth.</li> </ul>
value	String	Additional information value.

**Table 4-277** FlavorAzObject

Parameter	Type	Description
capacity	String	Cache capacity (value).
unit	String	Cache capacity (unit).
available_zones	Array of strings	AZ information.
az_codes	Array of strings	AZs where there are available resources.

**Status code: 400**



**Table 4-278** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 401**

**Table 4-279** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 403**

**Table 4-280** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 404**

**Table 4-281** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

**Status code: 500**

**Table 4-282** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/flavors?
cache_mode={cache_mode}&engine={engine}&engine_version={engine_version}&cpu_type={cpu_type}&capa
city={capacity}
```

## Example Responses

**Status code: 200**

Product flavors queried successfully.

```
{
  "flavors": [ {
    "spec_code": "redis.single.au1.large.1",
    "cloud_service_type_code": "hws.resource.type.dcs3",
    "cloud_resource_type_code": "hws.resource.type.dcs3",
    "cache_mode": "single",
    "engine": "redis",
    "engine_version": "4.0;5.0",
    "product_type": "generic",
    "cpu_type": "aarch64",
    "storage_type": "DRAM",
    "capacity": [ "1" ],
```

```
"billing_mode" : [ "Hourly" ],
"tenant_ip_count" : 1,
"pricing_type" : "normal",
"is_dec" : false,
"attrs" : [ {
  "capacity" : "1",
  "name" : "max_memory",
  "value" : "1"
}, {
  "capacity" : "1",
  "name" : "max_connections",
  "value" : "10000"
}, {
  "capacity" : "1",
  "name" : "sharding_num",
  "value" : "1"
}, {
  "capacity" : "1",
  "name" : "proxy_num",
  "value" : "0"
}, {
  "capacity" : "1",
  "name" : "db_number",
  "value" : "256"
}, {
  "capacity" : "1",
  "name" : "max_clients",
  "value" : "10000"
}, {
  "capacity" : "1",
  "name" : "max_bandwidth",
  "value" : "80"
} ],
"flavors_available_zones" : [ {
  "capacity" : "1",
  "unit" : "GB",
  "available_zones" : [ "d539378ec1324c85b76fefa3f7071458" ],
  "az_codes" : [ "region01" ]
} ],
"replica_count" : 1
} ]
}
```

#### Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.1004",
  "error_msg" : "Project ID does not match the token."
}
```

#### Status code: 401

Invalid authentication information.

```
{
  "error_code" : "DCS.1001",
  "error_msg" : "Invalid token."
}
```

#### Status code: 403

The request is rejected.

```
{
  "error_code" : "DCS.2003",
  "error_msg" : "This role does not have the permission to perform this operation."
}
```

**Status code: 404**

The requested resource is not found.

```
{  
  "error_code" : "DCS.4001",  
  "error_msg" : "The requested URL does not exist."  
}
```

**Status code: 500**

Internal service error.

```
{  
  "error_code" : "DCS.5000",  
  "error_msg" : "Internal service error."  
}
```

## Status Codes

Status Code	Description
200	Product flavors queried successfully.
400	Invalid request.
401	Invalid authentication information.
403	The request is rejected.
404	The requested resource is not found.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.9.2 Listing Maintenance Time Windows

### Function

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

### URI

GET /v2/instances/maintain-windows

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-283** Response body parameters

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

**Table 4-284** MaintainWindowsEntity

Parameter	Type	Description
seq	Integer	Sequence number of the maintenance time window.
default	Boolean	Whether a maintenance time window is set to the default time segment.
begin	String	UTC time when the maintenance time window starts. The format is HH:mm:ss.
end	String	UTC time when the maintenance time window ends. The format is HH:mm:ss.

**Status code: 500**

**Table 4-285** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

GET [https://{dcs\\_endpoint}/v2/instances/maintain-windows](https://{dcs_endpoint}/v2/instances/maintain-windows)

## Example Responses

**Status code: 200**

Maintenance time windows queried successfully.

```
{
  "maintain_windows" : [ {
    "default" : true,
    "end" : "19",
    "begin" : "18",
    "seq" : 1
  }, {
    "default" : false,
    "end" : "20",
    "begin" : "19",
    "seq" : 2
  }, {
    "default" : false,
    "end" : "21",
    "begin" : "20",
    "seq" : 3
  }, {
    "default" : false,
    "end" : "22",
    "begin" : "21",
    "seq" : 4
  }, {
    "default" : false,
    "end" : "23",
    "begin" : "22",
    "seq" : 5
  }, {
    "default" : false,
    "end" : "00",
    "begin" : "23",
    "seq" : 6
  }, {
    "default" : false,
    "end" : "01",
    "begin" : "00",
    "seq" : 1
  }, {
    "default" : false,
    "end" : "02",
    "begin" : "01",
    "seq" : 2
  }, {
    "default" : false,
    "end" : "03",
    "begin" : "02",
    "seq" : 3
  }, {
    "default" : false,
    "end" : "04",
    "begin" : "03",
    "seq" : 3
  }, {
    "default" : false,
    "end" : "05",
    "begin" : "04",
    "seq" : 4
  }, {
    "default" : false,
    "end" : "06",
    "begin" : "05",
    "seq" : 5
  }, {
    "default" : false,
    "end" : "07",
    "begin" : "06",
    "seq" : 6
  }, {
    "default" : false,
    "end" : "08",
```

```
"begin" : "07",  
  "seq" : 1  
}, {  
  "default" : true,  
  "end" : "09",  
  "begin" : "08",  
  "seq" : 2  
}, {  
  "default" : false,  
  "end" : "10",  
  "begin" : "09",  
  "seq" : 3  
}, {  
  "default" : false,  
  "end" : "11",  
  "begin" : "10",  
  "seq" : 4  
}, {  
  "default" : false,  
  "end" : "12",  
  "begin" : "11",  
  "seq" : 5  
}, {  
  "default" : false,  
  "end" : "13",  
  "begin" : "12",  
  "seq" : 6  
}, {  
  "default" : false,  
  "end" : "14",  
  "begin" : "13",  
  "seq" : 1  
}, {  
  "default" : true,  
  "end" : "15",  
  "begin" : "14",  
  "seq" : 2  
}, {  
  "default" : false,  
  "end" : "16",  
  "begin" : "15",  
  "seq" : 3  
}, {  
  "default" : false,  
  "end" : "17",  
  "begin" : "16",  
  "seq" : 4  
}, {  
  "default" : false,  
  "end" : "18",  
  "begin" : "17",  
  "seq" : 5  
}]  
}
```

## Status Codes

Status Code	Description
200	Maintenance time windows queried successfully.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.9.3 Querying the Tenant Quotas

### Function

This API is used to query the default instance quota and total memory quota of a tenant and the maximum and minimum quotas a tenant can apply for. Different tenants have different quotas in different regions.

### URI

GET /v2/{project\_id}/quota

**Table 4-286** Path Parameters

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

### Request Parameters

None

### Response Parameters

**Status code: 200**

**Table 4-287** Response body parameters

Parameter	Type	Description
quotas	<a href="#">quotas</a> object	Quota information.

**Table 4-288** quotas

Parameter	Type	Description
resources	Array of <a href="#">Resources</a> objects	List of quotas



**Table 4-289** Resources

Parameter	Type	Description
unit	String	Resource unit. <ul style="list-style-type: none"> <li>When <b>type</b> is set to <b>instance</b>, no value is returned.</li> <li>When <b>type</b> is set to <b>ram</b>, <b>GB</b> is returned.</li> </ul>
min	Integer	Minimum limit of instance quota when <b>type</b> is set to <b>instance</b> . <ul style="list-style-type: none"> <li>Minimum limit of memory quota when <b>type</b> is set to <b>ram</b>.</li> </ul>
max	Integer	Maximum limit of instance quota when <b>type</b> is set to <b>instance</b> . <ul style="list-style-type: none"> <li>Maximum limit of memory quota when <b>type</b> is set to <b>ram</b>.</li> </ul>
quota	Integer	Maximum number of instances that can be created and maximum allowed total memory.
used	Integer	Number of created instances and used memory.
type	String	The value can be <b>instance</b> or <b>ram</b> . <ul style="list-style-type: none"> <li><b>instances</b>: instance quota</li> <li><b>ram</b>: memory quota</li> </ul>

**Status code: 400**

**Table 4-290** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

**Status code: 500**

**Table 4-291** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum: <b>1024</b>
error_code	String	Error code. Maximum: <b>9</b>
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to <b>null</b> . Maximum: <b>1024</b>

## Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/quota
```

## Example Responses

**Status code: 200**

Tenant quota queried successfully.

```
{
  "quotas": {
    "resources": [ {
      "unit": { },
      "min": 1,
      "max": 10,
      "quota": 10,
      "used": 3,
      "type": "instance"
    }, {
      "unit": "GB",
      "min": 1,
      "max": 800,
      "quota": 800,
      "used": 22,
      "type": "ram"
    }
  ]
}
```

## Status Codes

Status Code	Description
200	Tenant quota queried successfully.
400	Invalid request.
500	Internal service error.

## Error Codes

See [Error Codes](#).

## 4.9.4 Querying AZs

### Function

This API is used to query the AZ information of the current region.

### URI

GET /v2/available-zones

### Request Parameters

None

### Response Parameters

Status code: 200

**Table 4-292** Response body parameters

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

**Table 4-293** AvailableZones

Parameter	Type	Description
code	String	AZ code.
port	String	AZ port.
name	String	AZ name.
id	String	AZ ID.
resource_availability	String	Whether the AZ has available resources. <ul style="list-style-type: none"> <li>● <b>true</b>: There are available resources in the AZ.</li> <li>● <b>false</b>: No resource is available</li> </ul> Enumeration values: <ul style="list-style-type: none"> <li>● <b>true</b></li> <li>● <b>false</b></li> </ul>

## Example Requests

```
GET https://{dcs_endpoint}/v2/available-zones
```

## Example Responses

**Status code: 200**

The query is successful.

```
{
  "region_id": "region00",
  "available_zones": [ {
    "code": "region01",
    "port": "8403",
    "name": "AZ 1.",
    "id": "effdcbc7d4d64a02aa1fa26b42f56533",
    "resource_availability": "true"
  }, {
    "code": "region02",
    "port": "8404",
    "name": "AZ 2.",
    "id": "a0865121f83b41cbafce65930a22a6e8",
    "resource_availability": "true"
  }, {
    "code": "region03",
    "port": "8408",
    "name": "AZ 3.",
    "id": "2dcb154ac2724a6d92e9bcc859657c1e",
    "resource_availability": "true"
  } ]
}
```

## Status Codes

Status Code	Description
200	The query is successful.

## Error Codes

See [Error Codes](#).

# 5 Outdated APIs (V1)

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## 5.1 Lifecycle Management APIs

### 5.1.1 Creating a DCS Instance

#### Function

This API is used to create a DCS instance.

#### URI

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

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

**Table 5-1** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

#### Request

##### Request parameters

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

**Table 5-2** Parameter description

Parameter	Type	Mandatory	Description
name	String	Yes	DCS instance name. An instance name can contain 4 to 64 characters and must start with a letter. Only letters, digits, underscores (_), and hyphens (-) are allowed.
description	String	No	Brief description of the DCS instance. The description supports up to 1024 characters. <b>NOTE</b> The backslash (\) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character (\) before the characters, for example, \\ and \".
engine	String	Yes	Cache engine. Value: <b>Redis</b> .
engine_version	String	Yes	Cache engine version. Options: <b>4.0</b> and <b>5.0</b> . <b>NOTE</b> DCS Redis 3.0 instances are no longer sold at new sites since the current version. The value can only be <b>4.0/5.0</b> . Redis 3.0 can still be used at existing sites, but Redis 4.0 and later are recommended.
spec_code	String	Yes	DCS instance specification code. To obtain the value, go to the instance creation page on the DCS console, and view <b>Flavor Name</b> in the <b>Instance Specification</b> table. For details about the specification codes, see the <b>Specification Code (spec_code in the API)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .
capacity	Float	Yes	Cache capacity. Unit: GB. <ul style="list-style-type: none"> <li>For a single-node or master/standby DCS Redis 3.0 instance, the value can be <b>2, 4, 8, 16, 32, or 64</b>. For a Proxy Cluster DCS Redis 3.0 instance, the value can be <b>64, 128, 256, 512, or 1024</b>.</li> <li>For a single-node or master/standby DCS Redis 4.0 or later instance, the value can be <b>0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 32, 24, 48, or 64</b>. For a cluster DCS Redis instance, the value can be <b>4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024</b>.</li> </ul>

Parameter	Type	Mandatory	Description
password	String	Yes	<p>Password of a DCS instance.</p> <p>The password of a DCS Redis instance must meet the following complexity requirements:</p> <ul style="list-style-type: none"> <li>• Must be a string consisting of 8 to 64 characters.</li> <li>• Must be different from the old password.</li> <li>• Contains at least three of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters (<code>`~!@#\$%^&amp;*()-_+=+ {&gt;,.&lt;./?</code>)</li> </ul> </li> </ul>
vpc_id	String	Yes	<p>VPC ID.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>• Method 1: Log in to VPC console and view the VPC ID in the VPC details.</li> <li>• Method 2: Call the API for querying VPCs. For details, see the "Querying VPCs" section in the <i>Virtual Private Cloud API Reference</i>.</li> </ul>
security_group_id	String	Yes	<p>ID of the security group which the instance belongs to.</p> <p>This parameter is mandatory when the <b>engine</b> is <b>Redis</b> and <b>engine_version</b> is <b>3.0</b>. DCS Redis 3.0 instances support access control by security groups.</p> <p>Redis 4.0 and later instances do not support access control by security groups.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>• Method 1: Log in to the VPC console and view the security group ID on the security group details page.</li> <li>• Method 2: Call the API for querying security groups. For details, see the "Querying Security Groups" section in the <i>Virtual Private Cloud API Reference</i>.</li> </ul>

Parameter	Type	Mandatory	Description
subnet_id	String	Yes	<p>Network ID of the subnet.</p> <p>Obtain the value by using either of the following methods:</p> <ul style="list-style-type: none"> <li>Method 1: Log in to VPC console and click the target subnet on the <b>Subnets</b> tab page. You can view the network ID on the displayed page.</li> <li>Method 2: Call the API for querying subnets. For details, see the "Querying Subnets" section in the <i>Virtual Private Cloud API Reference</i>.</li> </ul>
available_zones	Array	Yes	<p>ID of the AZ where the cache node resides and which has available resources. For details on how to obtain the value, see <a href="#">Querying AZ Information</a>. Check whether the AZ has available resources.</p> <p>Master/Standby, Proxy Cluster, and Redis Cluster DCS instances support cross-AZ deployment. You can specify an AZ for the standby node. When specifying AZs for nodes, use commas (,) to separate multiple AZs. For details, see the example request.</p>
instance_backup_policy	Object	No	<p>Backup policy.</p> <p>This parameter is available for master/standby and cluster DCS instances. For details, see <a href="#">Table 5-3</a> and <a href="#">Table 5-4</a>.</p>



Parameter	Type	Mandatory	Description
maintain_begin	String	No	<p>Time at which the maintenance time window starts.</p> <p>Format: hh:mm:ss.</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details on how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Window</a>.</li> <li>The start time must be set to 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_start</b> is left blank, parameter <b>maintain_end</b> is also blank. In this case, the system automatically set the start time to 02:00:00.</li> </ul>
maintain_end	String	No	<p>Time at which the maintenance time window ends.</p> <p>Format: hh:mm:ss.</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details on how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Window</a>.</li> <li>The end time is four hours later than the start time. For example, if the start time is 22:00:00, the end time is 02:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_end</b> is left blank, parameter <b>maintain_start</b> is also blank. In this case, the system automatically set the end time to 06:00:00.</li> </ul>
private_ips	Array of strings	No	IP address that is manually specified for a DCS instance.

Parameter	Type	Mandatory	Description
port	Integer	No	Port customization , which is supported only by Redis 4.0 and later instances and not by Redis 3.0 instances.  If this parameter is not sent or is left empty when you create a Redis instance, the default port 6379 will be used. To customize a port, specify a port number in the range from 1 to 65535.
rename_commands	Object	No	Critical command renaming , which is supported only by Redis 4.0 and later instances and not by Redis 3.0 instances.  If this parameter is not sent or is left empty when you create a Redis instance, no critical command will be renamed. Currently, you can rename the <b>COMMAND</b> , <b>KEYS</b> , <b>FLUSHDB</b> , <b>FLUSHALL</b> , <b>HGETALL</b> , <b>SCAN</b> , <b>HSCAN</b> , <b>SSCAN</b> , and <b>ZSCAN</b> commands.

**Table 5-3** instance\_backup\_policy parameter description

Parameter	Type	Mandatory	Description
save_days	Integer	No	This parameter is mandatory when <b>backup_type</b> is set to <b>manual</b> . Retention period. Unit: day. Value range: 1-7.
backup_type	String	No	Backup type. Options: <ul style="list-style-type: none"> <li>• <b>auto</b>: automatic backup.</li> <li>• <b>manual</b>: manual backup.</li> </ul> The default value is <b>manual</b> .
periodical_backup_plan	Object	Yes	Backup plan. For details, see <a href="#">Table 5-4</a> .

**Table 5-4** periodical\_backup\_plan parameter description

Parameter	Type	Mandatory	Description
begin_at	String	Yes	Time at which backup starts. "00:00-01:00" indicates that backup starts at 00:00:00.
period_type	String	Yes	Interval at which backup is performed. Currently, only weekly backup is supported.
backup_at	Array	Yes	Day in a week on which backup starts. Value range: 1-7, where 1 indicates Monday and 7 indicates Sunday.
timezone_offset	String	No	Time zone in which backup is performed. Value range: GMT-12:00 to GMT+12:00. If this parameter is left blank, the current time zone of the DCS-Server VM is used by default.

**Example request**

- Request URL:  
POST [https://{dcs\\_endpoint}/v1.0/{project\\_id}/instances](https://{dcs_endpoint}/v1.0/{project_id}/instances)

- Example:

```
{
  "name": "dcs-a11e",
  "description": "Create an instance",
  "engine": "Redis",
  "engine_version": "3.0",
  "capacity": 2,
  "spec_code": "XXXXXX",
  "password": "XXXXXX",
  "vpc_id": "27d99e17-42f2-4751-818f-5c8c6c03ff15",
  "security_group_id": "1477393a-29c9-4de5-843f-18ef51257c7e",
  "subnet_id": "ec2f34b9-20eb-4872-85bd-bea9fc943128",
  "available_zones":
  ["ae04cf9d61544df3806a3feeb401b204", "d573142f24894ef3bd3664de068b44b0"],
  "product_id": "XXXXXX",
  "instance_backup_policy": {
    "save_days": 1,
    "backup_type": "auto",
    "periodical_backup_plan": {
      "begin_at": "00:00-01:00",
      "period_type": "weekly",
      "backup_at": [
        1,
        2,
        3,
        4,
        5,
        6,
        7
      ]
    }
  }
},
```

```
"maintain_begin": "22:00:00",  
"maintain_end": "02:00:00"  
}
```

## Response

### Response parameters

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

**Table 5-5** Parameter description

Parameter	Type	Description
instance_id	String	DCS instance ID.
instances	Array of Objects	DCS instance list. For details, see <a href="#">Table 5-6</a> .

**Table 5-6** instances parameters

Parameter	Type	Description
instance_id	String	DCS instance ID.
instance_name	String	DCS instance name.

### Example response

```
{  
  "instances": [  
    {  
      "instance_id": "3c49fd6b-fc7c-419e-9644-b6cce008653f",  
      "instance_name": "dcs-demo"  
    }  
  ],  
  "instance_id": "3c49fd6b-fc7c-419e-9644-b6cce008653f"  
}
```

## Status Code

[Table 5-7](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-7** Status code

Status Code	Description
200	DCS instance created successfully.

## 5.1.2 Deleting a Single DCS Instance

### Function

This API is used to delete a specified DCS instance to free up all resources occupied by the DCS instance.

### URI

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

[Table 5-8](#) describes the parameter.

**Table 5-8** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	Instance ID.

### Request

#### Request parameters

None

#### Example request

Request URL:

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

### Response

#### Response parameters

None

#### Example response

None

### Status Code

[Table 5-9](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-9** Status code

Status Code	Description
204	DCS instances deleted successfully.

## 5.1.3 Batch Deleting DCS Instances

### Function

This API is used to delete multiple DCS instances at a time.

### URI

DELETE /v1.0/{project\_id}/instances?allFailure={allFailure}

[Table 5-10](#) describes the parameters.

**Table 5-10** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
allFailure	String	No	An indicator of whether all DCS instances failed to be created will be deleted. Options: Options: <ul style="list-style-type: none"> <li><b>true</b>: all instances that fail to be created are deleted. In this case, the <b>instances</b> parameter in the request can be empty.</li> <li><b>false</b> or other values: The DCS instances specified by the instances parameter in the API request will be deleted.</li> </ul>

### Request

#### Request parameters

[Table 5-11](#) describes the request parameters.

**Table 5-11** Parameter description

Parameter	Type	Mandatory	Description
instances	Array	No	IDs of DCS instances to be deleted. This parameter is set only when the <b>allFailure</b> parameter in the URI is set to <b>false</b> or another value. A maximum of 50 instances can be deleted at a time.

**Request URL:**

DELETE https://{dcs\_endpoint}/v1.0/{project\_id}/instances?allFailure={allFailure}

Example request with **allFailure** set to **false**:

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

**Response**

**Response parameters**

If the value of the **allFailure** parameter in the URI is **false**, an empty response is then returned. If the value of the **allFailure** parameter in the URI is **true**, a response containing the parameter in [Table 5-12](#) is returned.

**Table 5-12** Parameter description

Parameter	Type	Description
results	Array	For details about how to delete an instance, see <a href="#">Table 5-13</a> .

**Table 5-13** results parameter description

Parameter	Type	Description
instance	String	DCS instance ID.
result	String	Instance deletion result. Options: <b>success</b> and <b>failed</b>

**Example response**

```
{
  "results": [
```

```
{
  {
    "instance": "54602a9d-5e22-4239-9123-77e350df4a34",
    "result": "success"
  },
  {
    "instance": "7166cdea-dbad-4d79-9610-7163e6f8b640",
    "result": "success"
  }
}
```

## Status Code

**Table 5-14** describes the status code of successful operations. For details about other status codes, see **Table 7-1**.

**Table 5-14** Status codes

Status Code	Description
204	DCS instances deleted successfully.
204	DCS instances that failed to be created are cleared successfully.

## 5.1.4 Querying a DCS Instance

### Function

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

### URI

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

**Table 5-15** describes the parameters.

**Table 5-15** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <b>Obtaining a Project ID</b> .
instance_id	String	Yes	ID of the instance to be queried



## Request

### Request parameters

None

### Example request

Request URL:

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

## Response

### Response parameters

[Table 5-16](#) describes the response parameters.

**Table 5-16** Parameter description

Parameter	Type	Description
name	String	DCS instance name.
engine	String	DCS instance engine.
capacity	Integer	DCS instance cache capacity. Unit: GB.
ip	String	IP address for connecting to the DCS instance For a cluster instance, multiple IP addresses are returned and separated by commas (,). For example, 192.168.0.1,192.168.0.2.
domainName	String	Domain name of the instance.
port	Integer	Port number of the cache node.
status	String	Cache instance status. For details about status, see <a href="#">DCS Instance Statuses</a> .
libos	Boolean	<ul style="list-style-type: none"> <li><b>true:</b> This instance is a libos instance.</li> <li><b>false:</b> This instance is not a libos instance.</li> </ul>
description	String	Brief description of the DCS instance.
max_memory	Integer	Total memory size. Unit: MB.
used_memory	Integer	Size of the used memory. Unit: MB.
instance_id	String	DCS instance ID.

Parameter	Type	Description
resource_spec_code	String	Resource specifications. For example: <ul style="list-style-type: none"> <li>• <b>dc.single_node</b>: indicates a DCS instance in single-node mode.</li> <li>• <b>dc.master_standby</b>: indicates a DCS instance in master/standby mode.</li> <li>• <b>dc.cluster</b>: indicates a DCS instance in cluster mode.</li> </ul> For more specification codes, see the <b>Specification Code (spec_code in the API)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .
engine_version	String	Cache engine version.
internal_version	String	Internal DCS version.
charging_mode	Integer	Billing mode. <b>0</b> : Billing is not involved.
capacity_minor	String	Cache capacity of a small-scale, single-node DCS instance.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.
created_at	String	Time at which the DCS instance is created. For example, 2017-03-31T12:24:46.297Z.
error_code	String	Error code returned when the DCS instance fails to be created or is abnormal. For details about error codes, see <a href="#">Error Codes</a> .
user_id	String	User ID.
user_name	String	Username.
maintain_begin	String	Time at which the maintenance time window starts. Format: hh:mm:ss.
maintain_end	String	Time at which the maintenance time window ends. Format: hh:mm:ss.
product_type	String	Edition of DCS for Redis. Options: <ul style="list-style-type: none"> <li>• <b>generic</b>: standard edition</li> <li>• <b>libos</b>: high-performance edition</li> </ul>

Parameter	Type	Description
cpu_type	String	CPU architecture. The value can be <b>x86_64</b> or <b>aarch_64</b> .
storage_type	String	Memory type. Options: <b>DRAM</b> and <b>SCM</b> .
cache_mode	String	DCS instance type. Options: <ul style="list-style-type: none"> <li>• <b>single</b>: single-node</li> <li>• <b>ha</b>: master/standby</li> <li>• <b>cluster</b>: Redis Cluster</li> <li>• <b>proxy</b>: Proxy Cluster</li> </ul>
launched_at	String	Time when the instance started running.
available_zones	Array	AZ where a cache node resides. The value of this parameter in the response contains an AZ ID.
subnet_id	String	Subnet ID.
security_group_id	String	Security group ID.
cloud_service_type_code	String	Cloud service type code.
cloud_resource_type_code	String	Cloud resource type code.
product_id	String	Product ID.
security_group_name	String	Security group name.
subnet_name	String	Subnet name.
subnet_cidr	String	Subnet segment.
order_id	String	Order ID.
instance_backup_policy	Object	Backup policy. This parameter is available for master/standby and cluster DCS instances. For details, see <a href="#">Table 5-17</a> .

**Table 5-17** instance\_backup\_policy

Parameter	Type	Description
backup_policy_id	String	Backup policy ID.
created_at	String	Creation time.

Parameter	Type	Description
updated_at	String	Update time.
policy	Object	For details, see <a href="#">Table 5-3</a> and <a href="#">Table 5-4</a> .
tenant_id	String	Tenant ID.

### Example response

```
{
  "name": "dcs-a11e",
  "engine": "Redis",
  "capacity": 2,
  "ip": "192.168.3.100",
  "port": 6379,
  "status": "RUNNING",
  "description": "Create a instance",
  "instance_id": "68d5745e-6af2-40e4-945d-fe449be00148",
  "resource_spec_code": "dcs.single_node",
  "engine_version": "3.0",
  "internal_version": null,
  "charging_mode": 0,
  "vpc_id": "27d99e17-42f2-4751-818f-5c8c6c03ff15",
  "vpc_name": "vpc_4944a40e-ac57-4f08-9d38-9786e2759458_192",
  "created_at": "2017-03-31T12:24:46.297Z",
  "error_code": null,
  "product_id": "XXXXXX",
  "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",
  "available_zones": "XXXXXX",
  "max_memory": 460,
  "used_memory": 56,
  "user_id": "6d0977e4c9b74ae7b5a083a8d0d8fafa",
  "user_name": "user",
  "order_id": "XXXXXXXXXX",
  "maintain_begin": "22:00:00",
  "maintain_end": "02:00:00"
}
```

### Status Code

[Table 5-18](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-18** Status code

Status Code	Description
200	Specified instance queried successfully.

## 5.1.5 Querying All DCS Instances of a Tenant

### Function

This API is used to query DCS instances of a tenant, and allows you to specify query criteria.

### URI

GET /v1.0/{project\_id}/instances?  
start={start}&limit={limit}&name={name}&status={status}&id={id}&include\_failure={include\_failure}

**Table 5-19** describes the parameters.

**Table 5-19** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
start	Integer	No	Start number for querying DCS instances. It cannot be lower than 1. By default, the start number is 1.
limit	Integer	No	Number of DCS instances displayed on each page. Minimum value: <b>1</b> Maximum value: <b>2000</b> If this parameter is left unspecified, a maximum of 1000 DCS instances are displayed on each page.
name	String	No	DCS instance name.
id	String	No	Instance ID.
status	String	No	DCS instance status. For details about status, see <a href="#">DCS Instance Statuses</a> .

Parameter	Type	Mandatory	Description
include_failure	String	No	<p>An indicator of whether the number of DCS instances that failed to be created will be returned to the API caller.</p> <p>Options:</p> <ul style="list-style-type: none"> <li>• <b>true</b>: The number of DCS instances that failed to be created will be returned to the API caller.</li> <li>• <b>false</b> or others: The number of DCS instances that failed to be created will not be returned to the API caller.</li> </ul>

### Example

```
GET https://{dcs_endpoint}/v1.0/bd6b78e2ff9e4e47bc260803ddcc7a21/instances?start=1&limit=10&name=&status=&id=&include_failure=true
```

## Request

### Request parameters

None

### Example request

None

## Response

### Response parameters

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

**Table 5-20** Parameter description

Parameter	Type	Description
instances	Array	Array of DCS instance details.
instance_num	Integer	Number of DCS instances.

**Table 5-21** instances parameters

Parameter	Type	Description
name	String	DCS instance name.

Parameter	Type	Description
engine	String	Cache engine.
capacity	Integer	Cache capacity. Unit: GB.
ip	String	IP address for connecting to the DCS instance For a cluster instance, multiple IP addresses are returned and separated by commas (,). For example, 192.168.0.1,192.168.0.2.
port	Integer	Port number of the cache node.
status	String	Cache instance status. For details about status, see <a href="#">DCS Instance Statuses</a> .
max_memory	Integer	Overall memory size. Unit: MB.
used_memory	Integer	Size of the used memory. Unit: MB.
instance_id	String	DCS instance ID.
resource_spec_code	String	Resource specifications. For example: <ul style="list-style-type: none"> <li><b>dc.single_node</b>: indicates a DCS instance in single-node mode.</li> <li><b>dc.master_standby</b>: indicates a DCS instance in master/standby mode.</li> <li><b>dc.cluster</b>: indicates a DCS instance in cluster mode.</li> </ul> For more specification codes, see the <b>Specification Code (spec_code in the API)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .
engine_version	String	Cache engine version.
internal_version	String	Internal DCS version.
charging_mode	Integer	Billing mode. <b>0</b> : Billing is not involved.
capacity_minor	String	Small-scale cache capacity. Unit: GB.
vpc_id	String	VPC ID.
vpc_name	String	VPC name.

Parameter	Type	Description
created_at	String	Time at which the DCS instance is created. For example, 2017-03-31T12:24:46.297Z.
error_code	String	Error code returned when the DCS instance fails to be created or is abnormal. For details about error codes, see <a href="#">Error Codes</a> .
user_id	String	User ID.
user_name	String	Username.
maintain_begin	String	Time at which the maintenance time window starts. Format: hh:mm:ss.
maintain_end	String	Time at which the maintenance time window ends. Format: hh:mm:ss.
security_group_id	String	Security group name.

### Example response

```
{
  "instances": [
    {
      "max_memory": 2048,
      "used_memory": 1,
      "instance_id": "add1eee3-eaad-4975-a8d7-8cf853460e3d",
      "name": "lboka-single-4",
      "resource_spec_code": "redis.single.xu1.large.2",
      "spec_code": "redis.single.xu1.large.2",
      "engine": "Redis",
      "engine_version": "4.0",
      "internal_version": null,
      "charging_mode": 0,
      "capacity": 2,
      "capacity_minor": null,
      "vpc_id": "9d3938d4-d622-48f3-ab62-23f8ff8b7830",
      "vpc_name": null,
      "ip": "192.168.1.91",
      "domainName": "redis-add1eee3-eaad-4975-a8d7-8cf853460e3d.dcs.com",
      "domain_name": "redis-add1eee3-eaad-4975-a8d7-8cf853460e3d.dcs.com",
      "readonlyDomainName": null,
      "readonly_domain_name": null,
      "port": 6379,
      "status": "RUNNING",
      "freeze_scene": null,
      "created_at": "2021-04-18T13:36:44.144Z",
      "update_at": "2021-04-18T13:37:10.575Z",
      "error_code": null,
      "user_id": "e96cb82994ef49648c2bfad79455b0ef",
      "user_name": "lboka",
      "maintain_begin": "02:00:00",
      "maintain_end": "06:00:00",
      "no_password_access": "false",
      "access_user": null,
      "enable_publicip": false,
      "publicip_id": null,
      "publicip_address": null,
      "enable_ssl": false,
    }
  ]
}
```



```

"service_upgrade":false,
"service_task_id":"","
"security_group_id":null,
"tags":null,
"subnet_id":"fd47ed9c-78a9-44c5-a712-06d251381e04"},
],
"instance_num":1
}

```

## Status Code

[Table 5-22](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-22** Status code

Status Code	Description
200	All DCS instances of the tenant queried successfully.

## 5.1.6 Modifying Information About a DCS Instance

### Function

This API is used to modify the information about a DCS instance, including the instance name, description, backup policy, start and end time of the maintenance window, and security group.

### URI

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

[Table 5-23](#) describes the parameters.

**Table 5-23** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.

### Request

#### Request parameters

**Table 5-24** describes the request parameters.

**Table 5-24** Parameter description

Parameter	Type	Mandatory	Description
name	String	No	DCS instance name. An instance name can contain 4 to 64 characters, including letters, digits, underscores (_), and hyphens (-), and must start with a letter.
description	String	No	Brief description of the DCS instance. A brief description supports up to 1024 characters. <b>NOTE</b> "\" is defined as an escape character in the queue description. If you need to enter a backward slash (\) or a double quotation mark (") in the queue description, enter \\ or \".
instance_backup_policy	Object	No	Backup policy. This parameter is available for master/standby and cluster DCS instances. For details, see <a href="#">Table 5-3</a> and <a href="#">Table 5-4</a> .
maintain_begin	String	No	Time at which the maintenance time window starts. Format: hh:mm:ss. <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details on how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Window</a>.</li> <li>The start time must be set to 22:00:00, 02:00:00, 06:00:00, 10:00:00, 14:00:00, or 18:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_begin</b> is left blank, parameter <b>maintain_end</b> is also blank.</li> </ul>

Parameter	Type	Mandatory	Description
maintain_end	String	No	<p>Time at which the maintenance time window ends.</p> <p>Format: hh:mm:ss.</p> <ul style="list-style-type: none"> <li>The start time and end time of the maintenance time window must indicate the time segment of a supported maintenance time window. For details on how to query the time segments of supported maintenance time windows, see <a href="#">Querying Maintenance Time Window</a>.</li> <li>The end time is four hours later than the start time. For example, if the start time is 22:00:00, the end time is 02:00:00.</li> <li>Parameters <b>maintain_begin</b> and <b>maintain_end</b> must be set in pairs. If parameter <b>maintain_end</b> is left blank, parameter <b>maintain_start</b> is also blank.</li> </ul>
security_group_id	String	No	<p>Security group ID.</p> <p>The value can be obtained from the VPC console or the API.</p> <p>This parameter is supported only by DCS Redis 3.0 instances.</p>

### Example request

Request URL:

PUT `https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}`

- Example 1

```
{
  "description": "instance description"
}
```

- Example 2

```
{
  "name": "dcs002",
  "description": "instance description",
  "instance_backup_policy": {
    "backup_type": "auto",
    "save_days": 1,
    "periodical_backup_plan": {
      "begin_at": "00:00-01:00",
      "period_type": "weekly",
      "backup_at": [
        "1",
        "2",
        "3",
      ]
    }
  }
}
```

```

        "4",
        "6",
        "7"
    ]
  },
  "security_group_id": "18e9309f-f81a-4749-bb21-f74576292162",
  "maintain_begin": "02:00:00",
  "maintain_end": "06:00:00"
}

```

## Response

### Response parameters

None

### Example response

None

## Status Code

[Table 5-25](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-25** Status code

Status Code	Description
204	DCS instance modified successfully.

## 5.1.7 Scaling Up a DCS Instance

### Function

This API is used to scale up a DCS Redis instance in the **Running** state.

### URI

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

[Table 5-26](#) describes the parameters.

**Table 5-26** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

Parameter	Type	Mandatory	Description
instance_id	String	Yes	Instance ID.

## Request

### Request parameters

[Table 5-27](#) describes the request parameters.

**Table 5-27** Parameter description

Parameter	Type	Mandatory	Description
new_capacity	Integer	Yes	New specification (memory space) of the DCS instance. The new specification to which the DCS instance will be scaled up must be greater than the current specification. Unit: GB. The value must be supported specifications. For details, see the <b>Total Memory (GB)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .
newCapacityString	String	Yes	New specification (memory space) of the DCS instance. The new specification to which the DCS instance will be scaled up must be greater than the current specification. Unit: GB. The value must be supported specifications. For details, see the <b>Total Memory (GB)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .
spec_code	String	Yes	DCS instance specification code. For details about the specification codes, see the <b>Specification Code (spec_code in the API)</b> column in the "DCS Instance Specifications" section in <i>Distributed Cache Service User Guide</i> .

### Example request

- Request URL:  
POST https://{dcs\_endpoint}/v1.0/{project\_id}/instances/{instance\_id}/extend

- Example:

```
{
  "spec_code": "redis.single.au1.large.4",
  "new_capacity": 4,
  "newCapacityString": "4"
}
```

## Response

### Response parameters

None

### Example response

None

## Status Code

[Table 5-28](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-28** Status code

Status Code	Description
204	Scale-up task submitted successfully.

## 5.2 Instance Management APIs

### 5.2.1 Restarting DCS Instances or Clearing DCS Instance Data

#### Function

This API is used to restart a running DCS instance.

Data clearance operations cannot be undone on DCS Redis 4.0 and 5.0 instances.

#### URI

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

[Table 5-29](#) describes the parameter.

**Table 5-29** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

## Request

### Request parameters

[Table 5-30](#) describes the request parameters.

**Table 5-30** Parameter description

Parameter	Type	Mandatory	Description
action	String	Yes	Action performed on DCS instances. Options: <b>restart</b> , and <b>flush</b> . <b>NOTE</b> Only DCS Redis 4.0 and 5.0 instances can be flushed.
instances	Array	Yes	List of DCS instance IDs.

### Example request

- Request URL:  
PUT `https://{dcs_endpoint}/v1.0/{project_id}/instances/status`
- Example:  

```
{
  "action": "restart",
  "instances": [
    "2e803f66-fbb0-47ad-b6cb-fb87f5bed4ef"
  ]
}
```

## Response

### Response parameters

[Table 5-31](#) describes the response parameter.

**Table 5-31** Parameter description

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

**Table 5-32** results parameter description

Parameter	Type	Description
instance	String	DCS instance ID.
result	String	Instance modification result. Options: <b>success</b> or <b>failed</b>

**Example response**

```
{
  "results": [
    {
      "result": "success",
      "instance": "2e803f66-fbb0-47ad-b6cb-fb87f5bed4ef"
    }
  ]
}
```

**Status Code**

**Table 5-33** describes the status code of successful operations. For details about other status codes, see **Table 7-1**.

**Table 5-33** Status code

Status Code	Description
200	Successfully restarted DCS instance or cleared DCS instance data.

## 5.2.2 Querying Statistics of All Running Instances

**Function**

This API is used to query the statistics of all DCS instances that are in the **Running** state.

**URI**

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

**Table 5-34** describes the parameter.



**Table 5-34** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

## Request

### Request parameters

None

### Example request

```
GET https://{dcs_endpoint}/v1.0/{project_id}/instances/statistic
```

## Response

### Response parameters

[Table 5-35](#) describes the response parameter.

**Table 5-35** Parameter description

Parameter	Type	Description
statistics	Array	Statistics of all instances in the <b>Running</b> state. For details, see <a href="#">Table 5-36</a> .

**Table 5-36** statistics parameter description

Parameter	Type	Description
keys	Integer	Number of cached data records
instance_id	String	DCS instance ID
used_memory	Integer	Size of the used memory in MB
max_memory	Integer	Overall memory size in MB
cmd_get_count	Integer	Number of times the GET command is run
cmd_set_count	Integer	Number of times the SET command is run

Parameter	Type	Description
used_cpu	String	Percentage of CPU usage
input_kbps	String	Incoming traffic (kbit/s) of the DCS instance
output_kbps	String	Outgoing traffic (kbit/s) of the DCS instance

### Example response

```
{
  "statistics": [{
    "keys": 0,
    "instance_id": "e008652d-18e0-43ff-924e-072261e0372a",
    "used_memory": 0,
    "max_memory": 460,
    "cmd_get_count": 0,
    "cmd_set_count": 0,
    "used_cpu": "0.0",
    "input_kbps": "0.0",
    "output_kbps": "0.0"
  }, {
    "keys": 0,
    "instance_id": "c577a1eb-33b7-42c7-8231-ad32358599ac",
    "used_memory": 0,
    "max_memory": 460,
    "cmd_get_count": 0,
    "cmd_set_count": 0,
    "used_cpu": "0.0",
    "input_kbps": "0.0",
    "output_kbps": "0.0"
  }, {
    "keys": 0,
    "instance_id": "e8b98471-55d5-4695-b0bb-8f336a98e207",
    "used_memory": 0,
    "max_memory": 460,
    "cmd_get_count": 0,
    "cmd_set_count": 0,
    "used_cpu": "0.0",
    "input_kbps": "0.03",
    "output_kbps": "1.19"
  }, {
    "keys": 0,
    "instance_id": "bc61c690-4b34-4cbe-9ce3-11246aea7aba",
    "used_memory": 0,
    "max_memory": 6963,
    "cmd_get_count": 0,
    "cmd_set_count": 0,
    "used_cpu": "0.0",
    "input_kbps": "0.0",
    "output_kbps": "0.0"
  }
  ]
}
```

### Status Code

[Table 5-37](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-37** Status code

Status Code	Description
200	Statistics of all instances queried successfully.

## 5.2.3 Querying DCS Instance Status

### Function

This API is used to query the number of instances in different states.

### URI

GET /v1.0/{project\_id}/instances/status?include\_failure={include\_failure}

[Table 5-38](#) describes the parameters.

**Table 5-38** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
include_failure	String	No	An indicator of whether the number of DCS instances that failed to be created will be returned to the API caller. Options: <ul style="list-style-type: none"> <li>• <b>true</b>: The number of DCS instances that failed to be created will be returned to the API caller.</li> <li>• <b>false</b> or others: The number of DCS instances that failed to be created will not be returned to the API caller.</li> </ul>

### Request

#### Request parameters

None

#### Example request

GET https://{dcs\_endpoint}/v1.0/{project\_id}/instances/status?include\_failure=true

## Response

### Response parameters

**Table 5-39** describes the response parameters.

**Table 5-39** Parameter description

Parameter	Type	Description
redis	StatusStatistic object	Redis instance quantity statistics.
creating_count	Integer	Number of instances that are being created.
deleting_count	Integer	Number of instances that are being deleted.
running_count	Integer	Number of running instances.
error_count	Integer	Number of abnormal instances.
restarting_count	Integer	Number of instances that are being restarted.
createfailed_count	Integer	Number of instances that fail to be created.
extending_count	Integer	Number of instances that are being scaled up.
upgrading_count	Integer	Number of instances that are being upgraded.
paying_count	Integer	Number of instances for which payment is in progress.
migrating_count	Integer	Number of instances on which data migration is in progress.
flushing_count	Integer	Number of instances whose data is being cleared.
closed_count	Integer	Number of instances that have been stopped.
starting_count	Integer	Number of instances that are being started.
closing_count	Integer	Number of instances that are being stopped.
restoring_count	Integer	Number of instances for which data restoration is in progress.

**Table 5-40** StatusStatistic

Parameter	Type	Description
paying_count	Integer	Number of instances for which payment is in progress.
migrating_count	Integer	Number of instances on which data migration is in progress.
flushing_count	Integer	Number of instances whose data is being cleared.
upgrading_count	Integer	Number of instances that are being upgraded.
restoring_count	Integer	Number of instances for which data restoration is in progress.
extending_count	Integer	Number of instances that are being scaled up.
creating_count	Integer	Number of instances that are being created.
running_count	Integer	Number of running instances.
error_count	Integer	Number of abnormal instances.
createfailed_count	Integer	Number of instances that fail to be created.
restarting_count	Integer	Number of instances that are being restarted.

**Status code: 400**

**Table 5-41** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum length: 1024 characters
error_code	String	Error code. Maximum length: 9 characters
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum length: 1024 characters

**Status code: 500**

**Table 5-42** Response body parameters

Parameter	Type	Description
error_msg	String	Error message. Maximum length: 1024 characters
error_code	String	Error code. Maximum length: 9 characters
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null. Maximum length: 1024 characters

### Example response

```
{
  "paying_count":0,
  "migrating_count":0,
  "error_count":0,
  "restarting_count":0,
  "createfailed_count":0,
  "flushing_count":0,
  "redis":{
    "paying_count":0,
    "migrating_count":0,
    "error_count":0,
    "restarting_count":0,
    "createfailed_count":0,
    "flushing_count":0,
    "closed_count":0,
    "extending_count":2,
    "creating_count":0,
    "starting_count":0,
    "closing_count":0,
    "running_count":1,
    "upgrading_count":0,
    "restoring_count":0
  },
  "closed_count":0,
  "extending_count":2,
  "creating_count":0,
  "starting_count":0,
  "closing_count":0,
  "running_count":1,
  "upgrading_count":0,
  "restoring_count":0}
}
```

### Status Code

**Table 5-43** describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-43** Status code

Status Code	Description
200	Quantities of DCS instances in different statuses queried successfully.
400	The request is invalid.
500	Internal service error.

## 5.2.4 Changing the Password of a DCS Instance

### Function

This API is used to change the password of a DCS instance.

### URI

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

[Table 5-44](#) describes the parameters.

**Table 5-44** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.

### Request

#### Request parameters

[Table 5-45](#) describes the request parameters.

**Table 5-45** Parameter description

Parameter	Type	Mandatory	Description
old_password	String	Yes	Old password.

Parameter	Type	Mandatory	Description
new_password	String	Yes	<p>New password.</p> <p>Password complexity requirements:</p> <ul style="list-style-type: none"> <li>• Cannot be empty.</li> <li>• Cannot be the username or the username spelled backwards.</li> <li>• Can contain 8 to 64 characters.</li> <li>• Contain at least three of the following character types: <ul style="list-style-type: none"> <li>- Lowercase letters</li> <li>- Uppercase letters</li> <li>- Digits</li> <li>- Special characters (^~!@#\$%^&amp;*()-_+=\ {};,&lt;.&gt;/?)</li> </ul> </li> </ul>

### Example request

- Request URL:  
PUT https://{dcs\_endpoint}/v1.0/{project\_id}/instances/{instance\_id}/password
- Example:  

```
{
  "old_password": "XXXXXX",
  "new_password": "XXXXXX"
}
```

## Response

### Response parameters

[Table 5-46](#) describes the response parameters.

**Table 5-46** Parameter description

Parameter	Type	Description
result	String	<p>An indicator of whether the password is successfully changed: Options:</p> <ul style="list-style-type: none"> <li>• <b>Success:</b> Password changed successfully.</li> <li>• <b>passwordFailed:</b> The old password is incorrect.</li> <li>• <b>Locked:</b> This account has been locked.</li> <li>• <b>Failed:</b> Failed to change the password.</li> </ul>
message	String	Result of password change.
retry_times_left	String	Number of remaining password attempts. If the old password is incorrect, the value of this parameter is not <b>null</b> .



Parameter	Type	Description
lock_time	String	Account lockout duration. If the old password is incorrect or the account is locked, the value of this parameter is not <b>null</b> .
lock_time_left	String	Remaining time before the account is unlocked. If the account is locked, the value of this parameter is not <b>null</b> .

### Example response

```
//Change password success.
{
  "result" : "Success",
  "message" : "Modify DCSInstance password success.",
  "retry_times_left" : "5",
  "lock_time" : "0",
  "lock_time_left" : "0"
}
//Change password failed.
{
  "result" : "passwordFailed",
  "message" : "verify password failed.",
  "retry_times_left" : "4",
  "lock_time" : "5",
  "lock_time_left" : "5"
}
```

## Status Code

[Table 5-47](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-47** Status code

Status Code	Description
200	Password changed successfully.

## 5.3 Parameter Management APIs

### 5.3.1 Modifying Configuration Parameters

#### Function

You can modify the configuration parameters of your DCS instance to optimize DCS performance based on your requirements.

#### URI

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

**Table 5-48** describes the parameters.

**Table 5-48** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	ID of the instance to be modified.

## Request

### Request parameters

**Table 5-49** describes the request parameters.

**Table 5-49** Parameter description

Parameter	Type	Mandatory	Description
redis_config	Array	Yes	Array of configuration items of the DCS instance.

**Table 5-50** redis\_config parameter description

Parameter	Type	Mandatory	Description
param_id	String	Yes	Configuration item ID.
param_name	String	Yes	Configuration item name.
param_value	String	Yes	Value of the configuration item.

For possible values of parameters in [Table 5-50](#), see [Table 5-55](#).

### Example request

- Request URL:  
PUT `https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}/configs`
- Example:  

```
{
  "redis_config": [
```

```
{  
  "param_id": "1",  
  "param_name": "timeout",  
  "param_value": "100"  
}
```

## Response

### Response parameters

None

### Example response

None

## Status Code

[Table 5-51](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-51** Status code

Status Code	Description
204	DCS instance configurations modified successfully.

## 5.3.2 Querying Configuration Parameters

### Function

This API is used to query the configuration parameters of a DCS instance.

### URI

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

[Table 5-52](#) describes the parameters.

**Table 5-52** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

Parameter	Type	Mandatory	Description
instance_id	String	Yes	ID of the instance to be queried.

## Request

### Request parameters

None

### Example request

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

## Response

### Response parameters

[Table 5-53](#) describes the response parameters.

**Table 5-53** Parameter description

Parameter	Type	Description
status	String	Current status of a DCS instance.
instance_id	String	DCS instance ID.
redis_config	Array	Array of configuration items of the DCS instance. For details, see <a href="#">Table 5-54</a> .
config_status	String	DCS instance status that is being modified or has been modified. Options: <ul style="list-style-type: none"> <li>• <b>UPDATING</b></li> <li>• <b>FAILURE</b></li> <li>• <b>SUCCESS</b></li> </ul>
config_time	String	Time at which the DCS instance is operated on. For example, 2017-03-31T12:24:46.297Z.
cluster_v1	Boolean	Instance type. If <b>true</b> is returned, the instance is a Proxy Cluster DCS Redis 3.0 instance. If <b>false</b> is returned, the instance is not a Proxy Cluster DCS Redis 3.0 instance.

**Table 5-54** redis\_config parameter description

Parameter	Type	Description
description	String	Configuration item description.

Parameter	Type	Description
param_id	String	Configuration parameter ID. For the possible values, see the <b>Parameter ID</b> column in <a href="#">Table 5-55</a> .
param_name	String	Configuration parameter name. For the possible values, see the <b>Parameter Name</b> column in <a href="#">Table 5-55</a> .
param_value	String	Configuration parameter value.
default_value	String	Default value of the configuration parameter. For the possible values, see the <b>Default Value</b> column in <a href="#">Table 5-55</a> .
value_type	String	Type of the configuration parameter value. For the possible values, see the <b>Value Type</b> column in <a href="#">Table 5-55</a> .
value_range	String	Range of the configuration parameter value. For the possible values, see the <b>Value Range</b> column in <a href="#">Table 5-55</a> .
node_role	String	If null or empty is returned, the node is a default node, that is, the Redis Server node. If <b>proxy</b> is returned, the node is a proxy node.

[Table 5-55](#) describes the configuration parameters of a DCS instance.

**Table 5-55** Configuration parameters of a DCS instance

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
1	timeout	Integer	Connection between the client and server (DCS instance) will be closed if the client is idle for the timeout period (measured in seconds). A timeout period of 0 seconds indicates that the timeout function is disabled.	0–7200 seconds	0

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
2	maxmemory-policy	String	How Redis will select what to remove when maxmemory is reached.  For details about key eviction, see the <a href="#">Redis official website</a> .	volatile-lru allkeys-lru volatile-random allkeys-random volatile-ttl noeviction volatile-lfu allkeys-lfu	<b>noeviction</b> or <b>volatile-lru</b> The value range and default value depend on the instance version and type.
3	hash-max-ziplist-entries	Integer	When the number of entries in hashes is less than the value of this parameter, hashes are encoded using ziplist to save memory.	1-10,000	512
4	hash-max-ziplist-value	Integer	When the biggest entry in hashes does not exceed the length threshold indicated by this parameter, hashes are encoded using ziplist to save memory.	1-10,000	64
5	list-max-ziplist-entries	Integer	When the number of entries in lists is less than the value of this parameter, lists are encoded using ziplist to save memory.	1-10,000	512

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
6	list-max-ziplist-value	Integer	When the biggest entry in lists does not exceed the length threshold indicated by this parameter, lists are encoded using ziplist to save memory.	1-10,000	64
7	set-max-intset-entries	Integer	When a set is composed entirely of strings and the number of integers does not exceed the length threshold indicated by this parameter, the set is encoded using intset to save memory.	1-10,000	512
8	zset-max-ziplist-entries	Integer	When the number of entries in sorted sets is less than the value of this parameter, sorted sets are encoded using a memory efficient data structure.	1-10,000	128
9	zset-max-ziplist-value	Integer	When the biggest entry in sorted sets does not exceed the length threshold indicated by this parameter, sorted sets are encoded using ziplist to save memory.	1-10,000	64

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
10	latency-monitor-threshold	Integer Integer	<p>The minimum amount of latency that will be logged as latency spikes</p> <p>If this parameter is set to <b>0</b>, latency monitoring is disabled. If this parameter is set to a value greater than 0, all events blocking the server for a time greater than the configured value will be logged.</p> <p>By running the LATENCY command, you can perform operations related to latency monitoring, such as obtaining statistical data, and configuring and enabling latency monitoring. For more information about the latency-monitor-threshold, visit the Redis official website.</p>	0–86,400,000 ms	0
11	maxclients	Integer	The maximum number of clients allowed to be concurrently connected to a DCS instance.	1000–50,000	10,000



Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
12	reserved-memory	Integer	<p>Reserved memory, which is the number of megabytes reserved for the backend to perform internal processing such as persistence and master/standby replication.</p> <p>This parameter is available only for master/standby instances.</p> <p>The size of the reserved memory can be adjusted, but must be in the value range described in the next column. For more information about maximum available memory of each instance type, see <i>Distributed Cache Service User Guide</i>.</p>	0% to 50% of maximum memory space initially available to the instance and below the current free memory space. Unit: MB.	0

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
13	notify-keyspace-events	String	Keyspace event notification. If this parameter is configured, the Redis Sub/Pub feature will allow clients to receive an event when a Redis data set is modified.	<p>If the parameter value contains multiple characters, keyspace event notification is enabled and each character identifies a class of keyspace events for which Redis will send notifications.</p> <p>K: Keyspace events, published with the <code>__keyspace@__prefix</code></p> <p>E: Keyevent events, published with the <code>__keyevent@__prefix</code></p> <p>g: Generic commands (non-type specific) such as DEL, EXPIRE, and RENAME</p> <p>\$: String commands</p> <p>l: List commands</p> <p>s: Set commands</p> <p>h: Hash commands</p> <p>z: Sorted set commands</p>	Ex

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
				<p>x: Expired events (events generated every time a key expires)</p> <p>e: Evicted events (events generated when a key is evicted for maxmemory)</p> <p>For more information, see the following note.</p>	
14	repl-backlog-size	Integer	The replication backlog size in bytes. The backlog is a buffer that accumulates replica data when replicas are disconnected from the master. When a replica reconnects, a partial synchronization is performed to synchronize the data that was missed while replicas were disconnected.	16,384–1,073,741,824	1,048,576
15	repl-backlog-ttl	Integer	The amount of time, in seconds, before the backlog buffer is released, starting from the last a replica was disconnected. The value <b>0</b> indicates that the backlog is never released.	0–604,800	3600

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
16	appendfsync	String	Controls how often fsync() transfers cached data to the disk. Note that some OSs will perform a complete data transfer but some others only make a "best-effort" attempt.	Redis calls fsync() in one of the following ways: <b>no:</b> fsync() is never called. The OS will flush data when it is ready. This mode offers the highest performance. <b>always:</b> fsync() is called after every write to the AOF. This mode is very slow, but also very safe. <b>everysec:</b> fsync() is called once per second. This mode provides a compromise between safety and performance.	everysec
17	appendonly	String	Indicates whether to log each modification of the instance. By default, data is written to disks asynchronously in Redis. If this function is disabled, recently-generated data might be lost in the event of a power failure.	yes,no	yes

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
18	slowlog-log-slower-than	Integer	Redis uses the slow log to record queries that exceed a specified execution time. <b>slowlog-log-slower-than</b> is the maximum time allowed, in microseconds, for command execution. If this threshold is exceeded, Slow Log will record the command.	0–1,000,000	10,000
19	slowlog-max-len	Integer	The maximum allowed length of the Redis Slow Log logs. Slow Log consumes memory, but you can reclaim this memory by running the <b>SLOWLOG RESET</b> command.	0–1000	128
20	lua-time-limit	Integer	The maximum time allowed for executing a Lua script, in milliseconds.	100–5000	5000
21	repl-timeout	Integer	Replication timeout, in seconds.	30–3600	60
22	proto-max-bulk-len	Integer	The maximum size (in bytes) of a single element request.	1,048,576–536,870,912	536,870,912
23	master-read-only	String	Sets the instance to be read-only. All write operations will fail.	yes,no	no
24	client-output-buffer-slave-soft-limit	Integer	Soft limit (in bytes) on the output buffer of replica clients. Once the output buffer exceeds the soft limit and continuously remains above the limit for the time specified by the <b>client-output-buffer-limit-slave-soft-seconds</b> parameter, the client is disconnected.	0–134,217,728	13,421,772

Parameter ID	Parameter Name	Type	Description	Value Range	Default Value
25	client-output-buffer-slave-hard-limit	Integer	Hard limit (in bytes) on the output buffer of replica clients. Once the output buffer exceeds the hard limit, the client is immediately disconnected.	0–134,217,728	13,421,772
26	client-output-buffer-limit-slave-soft-seconds	Integer	Number of seconds that the output buffer remains above <b>client-output-buffer-slave-soft-limit</b> before the client is disconnected.	0–60	60
30	reserved-memory-percent	Integer	Percentage of memory reserved for non-cache memory usage.	0–80	0

 **NOTE**

More about the **notify-keyspace-events** parameter:

- Allowed characters are K, E, KE, A, g, l, s, h, z, x, e, and \$. The parameter value must contain either **K** or **E**.
- **A** is an alias for **g\$lshzxe** and cannot be used together with any of the characters in **g\$lshzxe**.
- For example, the value **Kl** means that Redis will notify Pub/Sub clients about keyspace events and list commands. The value **AKE** means Redis will notify Pub/Sub clients about all events.

**Example response**

```
{
  "status": "RUNNING",
  "instance_id": "c08fdc6e-5c25-4185-ab57-c0a5529b727f",
  "redis_config": [
    {
      "description": "How Redis will select what to remove when maxmemory is reached, You can select among five behaviors: volatile-lru : remove the key with an expire set using an LRU algorithm allkeys-lru : remove any key according to the LRU algorithm volatile-random: remove a random key with an expire set allkeys-random: remove a random key, any key volatile-ttl : remove the key with the nearest expire time (minor TTL) noeviction : don't expire at all, just return an error on write operations",
      "param_id": 2,
      "param_name": "maxmemory-policy",
      "param_value": "noeviction",
      "default_value": "noeviction",
      "value_type": "String",
      "value_range": "volatile-lru,allkeys-lru,volatile-random,allkeys-random,volatile-ttl,noeviction"
    },
    {
      "description": "Hashes are encoded using a memory efficient data structure when they have a small
```

```

number of entries",
  "param_id": 3,
  "param_name": "hash-max-ziplist-entries",
  "param_value": "512",
  "default_value": "512",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "Hashes are encoded using a memory efficient data structure when the biggest entry
does not exceed a given threshold",
  "param_id": 4,
  "param_name": "hash-max-ziplist-value",
  "param_value": "64",
  "default_value": "64",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "Lists are encoded using a memory efficient data structure when they have a small
number of entries",
  "param_id": 5,
  "param_name": "list-max-ziplist-entries",
  "param_value": "512",
  "default_value": "512",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "Lists are encoded using a memory efficient data structure when the biggest entry
does not exceed a given threshold",
  "param_id": 6,
  "param_name": "list-max-ziplist-value",
  "param_value": "64",
  "default_value": "64",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "When a set is composed of just strings that happen to be integers in radix 10 in the
range of 64 bit signed integers.",
  "param_id": 7,
  "param_name": "set-max-intset-entries",
  "param_value": "512",
  "default_value": "512",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "Sorted sets are encoded using a memory efficient data structure when they have a
small number of entries",
  "param_id": 8,
  "param_name": "zset-max-ziplist-entries",
  "param_value": "128",
  "default_value": "128",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{
  "description": "Sorted sets are encoded using a memory efficient data structure when the biggest
entry does not exceed a given threshold",
  "param_id": 9,
  "param_name": "zset-max-ziplist-value",
  "param_value": "64",
  "default_value": "64",
  "value_type": "Integer",
  "value_range": "1-10000"
},
{

```

```

    "description": "Close the connection after a client is idle for N seconds (0 to disable)",
    "param_id": 1,
    "param_name": "timeout",
    "param_value": "0",
    "default_value": "0",
    "value_type": "Integer",
    "value_range": "0-7200"
  },
  {
    "description": "Only events that run in more time than the configured latency-monitor-threshold
will be logged as latency spikes. If latency-monitor-threshold is set to 0, latency monitoring is disabled. If
latency-monitor-threshold is set to a value greater than 0, all events blocking the server for a time equal to
or greater than the configured latency-monitor-threshold will be logged.",
    "param_id": 10,
    "param_name": "latency-monitor-threshold",
    "param_value": "0",
    "default_value": "0",
    "value_type": "Integer",
    "value_range": "0-86400000"
  },
  {
    "description": "The total memory, in bytes, reserved for non-data usage.",
    "param_id": 12,
    "param_name": "reserved-memory",
    "param_value": "0",
    "default_value": "0",
    "value_type": "Integer",
    "value_range": "0-6553"
  },
  {
    "description": "Redis can notify Pub or Sub clients about events happening in the key space",
    "param_id": 13,
    "param_name": "notify-keyspace-events",
    "param_value": null,
    "default_value": null,
    "value_type": "regular",
    "value_range": "([KE]+([A][g$lshzxe]+)){0,11}"
  }
],
"config_status": "SUCCESS",
"config_time": ""
}

```

## Status Code

[Table 5-56](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-56** Status code

Status Code	Description
200	Instance configurations queried successfully.

## 5.4 Backup and Restoration APIs



## 5.4.1 Backing Up a DCS Instance

### Function

This API is used to back up a specified DCS instance.

#### NOTE

Only master/standby and cluster DCS instances can be backed up and restored, while single-node instances cannot.

### URI

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

[Table 5-57](#) describes the parameters.

**Table 5-57** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.

### Request

#### Request parameters

[Table 5-58](#) describes the request parameters.

**Table 5-58** Parameter description

Parameter	Type	Mandatory	Description
remark	String	No	Description of DCS instance backup.

#### Example request

- Request URL:  
POST https://{dcs\_endpoint}/v1.0/{project\_id}/instances/{instance\_id}/backups
- Example:  

```
{
  "remark": "Backup instances"
}
```

## Response

### Response parameters

[Table 5-59](#) describes the response parameter.

**Table 5-59** Parameter description

Parameter	Type	Description
backup_id	String	ID of the backup record

### Example response

```
{
  "backup_id": "548ceeff-2cbb-47ab-9a1c-7b085a8c08d7"
}
```

## Status Code

[Table 5-60](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-60** Status code

Status Code	Description
200	Backup task created successfully.

## 5.4.2 Restoring a DCS Instance

### Function

This API is used to restore a specified DCS instance.

#### NOTE

Only master/standby and cluster DCS instances can be backed up and restored, while single-node instances cannot.

### URI

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

[Table 5-61](#) describes the parameters.

**Table 5-61** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.

## Request

### Request parameters

[Table 5-62](#) describes the request parameters.

**Table 5-62** Parameter description

Parameter	Type	Mandatory	Description
remark	String	No	Description of DCS instance restoration
backup_id	String	Yes	ID of the backup record

### Example request

Request URL:

```
POST https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}/restores
```

Example:

```
{
  "remark": "restore instance",
  "backup_id": "8ba256cb-e5ac-44f6-a3da-c03d8f0e5029"
}
```

## Response

### Response parameters

[Table 5-63](#) describes the response parameter.

**Table 5-63** Parameter description

Parameter	Type	Description
restore_id	String	ID of the restoration record

### Example response

```
{
  "restore_id": "a6155972-800c-4170-a479-3231e907d2f6"
}
```

## Status Code

[Table 5-64](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-64** Status code

Status Code	Description
200	Restoration task created successfully.

## 5.4.3 Querying DCS Instance Backup Records

### Function

This API is used to query the backup records of a specified DCS instance.

### URI

GET /v1.0/{project\_id}/instances/{instance\_id}/backups?  
start={start}&limit={limit}&beginTime={beginTime}&endTime={endTime}

[Table 5-65](#) describes the parameters.

**Table 5-65** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.
start	Integer	No	Start sequence number of the backup record that is to be queried. By default, this parameter is set to <b>1</b> .

Parameter	Type	Mandatory	Description
limit	Integer	No	Number of backup records displayed on each page. The minimum value of this parameter is <b>1</b> . If this parameter is not set, 10 backup records are displayed on each page by default.
beginTime	String	No	Start time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.
endTime	String	No	End time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.

## Request

### Request parameters

None

### Example request

```
GET https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}/backups?
start={start}&limit={limit}&beginTime={beginTime}&endTime={endTime}
```

## Response

### Response parameters

[Table 5-66](#) describes the response parameters.

**Table 5-66** Parameter description

Parameter	Type	Description
backup_record_response	Array	Array of the backup records. For details about backup_record_response, see <a href="#">Table 5-67</a> .
total_num	Integer	Number of obtained backup records.

**Table 5-67** backup\_record\_response parameter description

Parameter	Type	Description
status	String	Backup status. Options: <ul style="list-style-type: none"> <li>● <b>waiting</b>: DCS instance restoration is waiting to begin.</li> <li>● <b>backucing</b>: DCS instance backup is in progress.</li> <li>● <b>succeed</b>: DCS instance backup succeeded.</li> <li>● <b>failed</b>: DCS instance backup failed.</li> <li>● <b>expired</b>: The backup file expires.</li> <li>● <b>deleted</b>: The backup file has been deleted manually.</li> </ul>
remark	String	Description of DCS instance backup
period	String	Time segment in which DCS instance backup was performed
progress	String	Backup progress
size	Long	Size of the backup file. Unit: byte.
instance_id	String	DCS instance ID
backup_id	String	ID of the backup record
created_at	String	Time at which the backup task is created
updated_at	String	Time at which DCS instance backup is completed
execution_at	String	Time at which the backup starts.
backup_type	String	Backup type. Options: <ul style="list-style-type: none"> <li>● <b>manual</b>: manual backup</li> <li>● <b>auto</b>: automatic backup</li> </ul>
backup_name	String	Name of the backup record
error_code	String	Error code returned if DCS instance backup fails. For details about error codes, see <a href="#">Table 5-68</a> .
is_support_restore	String	An indicator of whether restoration is supported. Options: <b>TRUE</b> or <b>FALSE</b> .

**Table 5-68** Error codes returned in case of a backup or restoration failure

Error Code	Description
dcs.08.0001	Failed to start the backup and restore tool.
dcs.08.0002	Operation timed out.

Error Code	Description
dcs.08.0003	Failed to delete bucket.
dcs.08.0004	Failed to obtain AK/SK.
dcs.08.0005	Failed to create bucket.
dcs.08.0006	Failed to obtain backup file size.
dcs.08.0007	Data synchronization failed during instance restoration.
dcs.08.0008	Automatic backup of the instance cannot start because the instance is running other jobs.

### Example response

```
{
  "backup_record_response": [
    {
      "status": "succeed",
      "remark": "001",
      "period": null,
      "progress": "100.00",
      "size": 880232,
      "instance_id": "5560df16-cebf-4473-95c4-d1b573c16e79",
      "backup_id": "4631832a-14c6-45b0-a0b3-3abd8f591ad1",
      "created_at": "2019-05-10T08:31:16.166Z",
      "updated_at": "2019-05-10T08:32:30.546Z",
      "execution_at": "2019-05-10T08:31:21.461Z",
      "backup_type": "manual",

      "backup_name": "backup_20190510163116",
      "error_code": null,
      "is_support_restore": "TRUE"
    }
  ],
  "total_num": 1
}
```

## Status Code

**Table 5-69** describes the status code of successful operations. For details about other status codes, see **Table 7-1**.

**Table 5-69** Status code

Status Code	Description
200	DCS instance backup records queried successfully.

## 5.4.4 Querying DCS Instance Restoration Records

### Function

This API is used to query the restoration records of a specified DCS instance.

### URI

GET /v1.0/{project\_id}/instances/{instance\_id}/restores?  
start={start}&limit={limit}&beginTime={beginTime}&endTime={endTime}

**Table 5-70** describes the parameters.

**Table 5-70** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID.
start	Integer	No	Start sequence number of the restoration record to be queried. By default, this parameter is set to <b>1</b> .
limit	Integer	No	Number of restoration records displayed on each page. The minimum value of this parameter is <b>1</b> . If this parameter is not specified, 10 restoration records are displayed on each page by default.
beginTime	String	No	Start time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.
endTime	String	No	End time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.

### Request

#### Request parameters

None

#### Example request

```
GET https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}/restores?
start={start}&limit={limit}&beginTime={beginTime}&endTime={endTime}
```



## Response

### Response parameters

[Table 5-71](#) describes the response parameters.

**Table 5-71** Parameter description

Parameter	Type	Description
restore_record_response	Array	Array of the restoration records.
total_num	Integer	Number of obtained backup records.

**Table 5-72** restore\_record\_response parameter description

Parameter	Type	Description
status	String	Restoration status <ul style="list-style-type: none"> <li>● <b>waiting</b>: DCS instance restoration is waiting to begin.</li> <li>● <b>restoring</b>: DCS instance restoration is in progress.</li> <li>● <b>succeed</b>: DCS instance restoration succeeded.</li> <li>● <b>failed</b>: DCS instance restoration failed.</li> </ul>
progress	String	Restoration progress
restore_id	String	ID of the restoration record
backup_id	String	ID of the backup record
restore_remark	String	Description of DCS instance restoration
backup_remark	String	Description of DCS instance backup
created_at	String	Time at which the restoration task is created
updated_at	String	Time at which DCS instance restoration completed
restore_name	String	Name of the restoration record
backup_name	String	Name of the backup record
error_code	String	Error code returned if DCS instance restoration fails. For details about error codes, see <a href="#">Table 5-68</a> .

### Example response

```
{
  "restore_record_response": [
    {
      "status": "succeed",
      "progress": "100.00",
      "restore_id": "a6155972-800c-4170-a479-3231e907d2f6",
      "backup_id": "f4823e9e-fe9b-4ffd-be79-4e5d6de272bb",
      "restore_remark": "doctest",
      "backup_remark": null,
      "created_at": "2017-07-18T21:41:20.721Z",
      "updated_at": "2017-07-18T21:41:35.182Z",
      "restore_name": "restore_20170718214120",
      "backup_name": "backup_20170718000002",
      "sourceInstanceId": "dcb96c22-fd6f-41c0-88b5-544784558dd9",
      "sourceInstanceName": "Test-DCS-MS-3-f79a983f",
      "error_code": null
    }
  ],
  "total_num": 1
}
```

## Status Code

[Table 5-73](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-73** Status code

Status Code	Description
200	DCS instance restoration record queried successfully.

## 5.4.5 Deleting Backup Files

### Function

This API is used to delete the files backed up by a DCS instance.

### URI

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

[Table 5-74](#) describes the parameters.

**Table 5-74** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .
instance_id	String	Yes	DCS instance ID
backup_id	String	Yes	ID of the backup record

## Request

### Request parameters

None

### Example request

Request URL:

```
DELETE https://{dcs_endpoint}/v1.0/{project_id}/instances/{instance_id}/backups/{backup_id}
```

## Response

### Response parameters

[Table 5-75](#) describes the response parameters.

**Table 5-75** Parameter description

Parameter	Type	Description
message	String	Result of deleting the backup file

### Example response

```
{
  "message": ""
}
```

## Status Code

[Table 5-76](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-76** Status code

Status Code	Description
200	Backup file deleted successfully.

## 5.5 Other APIs

### 5.5.1 Querying Service Specifications

#### Function

This API is used to query the product ID (parameter **product\_id**) which indicates the specifications of the DCS service you created.

#### URI

GET /v1.0/products

#### Request

##### Request parameters

None

##### Example request

None

#### Response

##### Response parameters

[Table 5-77](#) describes the response parameters.

**Table 5-77** Parameter description

Parameter	Type	Description
products	Array	List of specifications of the DCS service to which you can subscribe.

**Table 5-78** products parameter description

Parameter	Type	Description
product_id	String	Product ID used to differentiate DCS specifications.
cache_mode	String	DCS instance type. Options: <ul style="list-style-type: none"> <li>● <b>single</b>: single-node</li> <li>● <b>ha</b>: master/standby</li> <li>● <b>cluster</b>: Redis Cluster</li> </ul>
product_type	String	Edition of DCS for Redis.
cpu_type	String	CPU architecture.
storage_type	String	Storage type.
details	Array of Object	Details of the specifications. <a href="#">Table 5-79</a> describes the parameters in this array.
engine	String	Cache engine.
engine_versions	String	Cache engine version.
spec_details	String	DCS specifications. The value subjects to the returned specifications.
spec_details2	String	Detailed DCS specifications, including the maximum number of connections and maximum memory size.
charging_type	String	Billing mode.
price	Double	Price of the DCS service to which you can subscribe. (This parameter has been abandoned.)
currency	String	Currency.
prod_type	String	Product type. Options: <b>instance</b> and <b>obs_space</b> .
cloud_service_type_code	String	Cloud service type code.
cloud_resource_type_code	String	Cloud resource type code.
flavors	Array	AZs with available resources. <a href="#">Table 5-80</a> describes the parameters in this array.

**Table 5-79** details parameter description

Parameter	Type	Description
capacity	String	Specification (total memory) of the DCS instance.
max_bandwidth	String	Maximum bandwidth supported by the specification.
max_clients	String	Maximum number of clients supported by the specification, which is usually equal to the maximum number of connections.
max_connections	String	Maximum number of connections supported by the specification.
max_in_bandwidth	String	Maximum inbound bandwidth supported by the specification, which is usually equal to the maximum bandwidth.
max_memory	String	Maximum available memory.
tenant_ip_count	String	Number of tenant IP addresses corresponding to the specifications.
sharding_num	String	Number of shards supported by the specifications.
proxy_num	String	Number of proxies supported by Proxy Cluster instances of the specified specifications. If the instance is not a Proxy Cluster instance, the value of this parameter is <b>0</b> .
db_number	String	Number of DBs of the specifications.

**Table 5-80** flavors parameter description

Parameter	Type	Description
capacity	String	Specification (total memory) of the DCS instance.
unit	String	Capacity unit.
available_zones	Array	AZ ID.

### Example response

```
{
  "products": [
    {
      "details": {
        "capacity": 64,
        "max_memory": 64,
        "max_connections": 20000,

```

```

        "max_clients": 80000,
        "max_bandwidth": 2000,
        "max_in_bandwidth": 600,
        "proc_num": 8
    },
    "engine": "redis",
    "price": 0.04,
    "currency": "1",
    "flavors": [
        {
            "capacity": "64",
            "unit": "GB",
            "available_zones": [
                "ae04cf9d61544df3806a3feeb401b204",
                "882f6e449e3245dbb8c1c0fafa494c89"
            ]
        },
        {
            "capacity": "128",
            "unit": "GB",
            "available_zones": [
                "ae04cf9d61544df3806a3feeb401b204",
                "882f6e449e3245dbb8c1c0fafa494c89"
            ]
        },
        {
            "capacity": "256",
            "unit": "GB",
            "available_zones": [
                "ae04cf9d61544df3806a3feeb401b204",
                "882f6e449e3245dbb8c1c0fafa494c89"
            ]
        }
    ],
    "product_id": "00301-30112-0--0",
    "spec_code": "dcs.cluster",
    "cache_mode": "cluster",
    "product_type": "generic",
    "cpu_type": "x86_64",
    "storage_type": "DRAM",
    "engine_versions": "3.0",
    "spec_details": "[{"mem": "64,128,256"}]",
    "spec_details2": "[{"capacity": 64, "max_memory": 600, "max_connections": 20000, "max_clients": 80000, "max_bandwidth": 2000, "max_in_bandwidth": 600, "proc_num": 8}, {"capacity": 128, "max_memory": 128, "max_connections": 20000, "max_clients": 160000, "max_bandwidth": 2000, "max_in_bandwidth": 600, "proc_num": 16}, {"capacity": 256, "max_memory": 256, "max_connections": 20000, "max_clients": 160000, "max_bandwidth": 2000, "max_in_bandwidth": 600, "proc_num": 32}, {"capacity": 512, "max_memory": 512, "max_connections": 20000, "max_clients": 160000, "max_bandwidth": 2000, "max_in_bandwidth": 600, "proc_num": 64}, {"capacity": 1024, "max_memory": 1024, "max_connections": 20000, "max_clients": 160000, "max_bandwidth": 2000, "max_in_bandwidth": 600, "proc_num": 128}]",
    "charging_type": "Hourly",
    "prod_type": "instance",
    "cloud_service_type_code": "XXXX",
    "cloud_resource_type_code": "XXXX"
    },
}

```

## Status Code

[Table 5-81](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-81** Status code

Status Code	Description
200	Service specifications queried successfully.

## 5.5.2 Querying the Quota of a Tenant

### Function

This API is used to query the default instance quota and total memory quota of a tenant and the maximum and minimum quotas a tenant can apply for. Different tenants have different quotas in different regions.

### URI

GET /v1.0/{project\_id}/quota

[Table 5-82](#) describes the parameter.

**Table 5-82** Parameter description

Parameter	Type	Mandatory	Description
project_id	String	Yes	Project ID. For details on how to obtain the value of this parameter, see <a href="#">Obtaining a Project ID</a> .

### Request

#### Request parameters

None

#### Example request

None

### Response

#### Response parameters

[Table 5-83](#) describes the response parameters.



**Table 5-83** Parameter description

Parameter	Type	Mandatory	Description
quotas	Object	Yes	Quota information. For details, see <a href="#">Table 5-84</a> .

**Table 5-84** quotas parameter description

Parameter	Type	Mandatory	Description
resources	Array	Yes	List of quotas. For details, see <a href="#">Table 5-85</a> .
resource_user	Object	Yes	Information about a resource tenant For details, see <a href="#">Table 5-86</a> .

**Table 5-85** resources parameter description

Parameter	Type	Description
quota	Integer	Maximum number of instances that can be created and maximum allowed total memory.
used	Integer	Number of created instances and used memory.
type	String	Values: <ul style="list-style-type: none"> <li>• <b>instances</b>: indicates the instance quota.</li> <li>• <b>ram</b>: indicates the memory quota.</li> </ul>
unit	String	Resource unit. <ul style="list-style-type: none"> <li>• When <b>type</b> is set to <b>instance</b>, no value is returned.</li> <li>• When <b>type</b> is set to <b>ram</b>, <b>GB</b> is returned.</li> </ul>
max	Integer	<ul style="list-style-type: none"> <li>• Indicates the maximum limit of instance quota when <b>type</b> is set to <b>instance</b>.</li> <li>• Indicates the maximum limit of memory quota when <b>type</b> is set to <b>ram</b>.</li> </ul>

Parameter	Type	Description
min	Integer	<ul style="list-style-type: none"> <li>Indicates the minimum limit of instance quota when <b>type</b> is set to <b>instance</b>.</li> <li>Indicates the minimum limit of memory quota when <b>type</b> is set to <b>ram</b>.</li> </ul>

**Table 5-86** resource\_user parameter description

Parameter	Type	Description
tenant_id	String	Resource tenant ID
tenant_name	String	Resource tenant name

### Example response

```
{
  "quotas": {
    "resources": [
      {
        "quota": 10,
        "used": 3,
        "type": "instance",
        "min": 1,
        "max": 10,
        "unit": null
      },
      {
        "quota": 800,
        "used": 22,
        "type": "ram",
        "min": 1,
        "max": 800,
        "unit": "GB"
      }
    ],
    "resource_user": {
      "tenant_id": "836152f9838a44089f40f3cf6fd432bf",
      "tenant_name": "op_svc_dcs_003"
    }
  }
}
```

### Status Code

**Table 5-87** describes the status code of successful operations. For details about other status codes, see **Table 7-1**.

**Table 5-87** Status code

Status Code	Description
200	Tenant quota queried successfully.

## 5.5.3 Querying Maintenance Time Window

### Function

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

### URI

GET /v1.0/instances/maintain-windows

### Request

#### Request parameters

None

#### Example request

None

### Response

#### Response parameters

[Table 5-88](#) describes the response parameters.

**Table 5-88** Parameter description

Parameter	Type	Description
maintain_windows	Array	List of supported maintenance time windows.

**Table 5-89** maintain\_windows parameter description

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

Parameter	Type	Description
end	String	End time of the maintenance time window.
default	Boolean	An indicator of whether the 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 5-90](#) describes the status code of successful operations. For details about other status codes, see [Table 7-1](#).

**Table 5-90** Status code

Status Code	Description
200	Successfully queried the maintenance time window.

## 5.5.4 Querying AZ Information

### Function

This API is used to query the ID of the AZ where a DCS instance resides.

### URI

GET /v1.0/availableZones

### Request

#### Request parameters

None

#### Example request

None

### Response

#### Response parameters

[Table 5-91](#) describes the response parameters.

**Table 5-91** Parameter description

Parameter	Type	Description
region_id	String	Region ID.
available_zones	Array	Array of AZs. For details, see <a href="#">Table 5-92</a> .

**Table 5-92** Parameter description of the available\_zones array

Parameter	Type	Description
id	String	AZ ID.
code	String	AZ code.
name	String	AZ name.

Parameter	Type	Description
port	String	Port number of the AZ.
resource_availability	String	An indicator of whether there are available resources in the AZ. <ul style="list-style-type: none"> <li>● <b>true</b>: There are available resources in the AZ.</li> <li>● <b>false</b>: There are no available resources in the AZ.</li> </ul>

### Example response

```
{
  "regionId": "XXXXXX",
  "available_zones": [
    {
      "id": "f84448fd537f46078dd8bd776747f573",
      "code": "XXXXXX",
      "name": "XXXXXX",
      "port": "8003",
      "resource_availability": "true"
    },
    {
      "id": "12c47a78666b4e438cd0c692b9860387",
      "code": "XXXXXX",
      "name": "XXXXXX",
      "port": "8002",
      "resource_availability": "true"
    },
    {
      "id": "0725858e0d26434f9aa3dc5fc40d5697",
      "code": "XXXXXX",
      "name": "XXXXXX",
      "port": "8009",
      "resource_availability": "true"
    }
  ]
}
```

### Status Code

**Table 5-93** describes the status code of successful operations. For details about other status codes, see **Table 7-1**.

**Table 5-93** Status code

Status Code	Description
200	AZ information queried successfully.

# 6 Permissions Policies and Supported Actions

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This chapter describes fine-grained permissions management for your DCS. If your account does not need individual IAM users, you can skip the configurations described in 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 policies or roles 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 who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user wants to query ECSs using an API, the user must have been granted permissions that allow the **dc:servers:list** action.

## Supported Actions

DCS 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. Actions supported by policies are specific to APIs. Common concepts related to policies include:

- Permissions: Allow or deny 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.
- **Dependent actions:** When assigning permissions for an action, you also need to assign permissions for the dependent actions.
- **IAM and enterprise projects:** Type of projects for which an action will take effect. Policies that contain actions supporting both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Project. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. The check mark (√) indicates that the action supports the project and the cross symbol (×) indicates that the action does not support the project.

The following table lists the API actions supported by DCS.

**Table 6-1** DCS actions

Permissions	Action	API	IAM Project	Enterprise Project
Creating DCS instances	dcs:instance:create	POST /v1.0/{project_id}/instances	√	√
Querying an instance	dcs:instance:get	GET /v1.0/{project_id}/instances/{instance_id}	√	√
Modifying the information about an instance	dcs:instance:modify	PUT /v1.0/{project_id}/instances/{instance_id}	√	√
Deleting an instance	dcs:instance:delete	DELETE /v1.0/{project_id}/instances/{instance_id}	√	√
Expanding instance capacity	dcs:instance:scale	POST /v1.0/{project_id}/instances/{instance_id}/extend	√	√
Querying all instances	dcs:instance:list	GET /v1.0/{project_id}/instances	√	√
Querying instance configuration parameters	dcs:instance:getConfiguration	GET /v1.0/{project_id}/instances/{instance_id}/configs	√	√



Permissions	Action	API	IAM Project	Enterprise Project
Modifying instance configuration parameters	dc:instance:modify Configuration	PUT /v1.0/{project_id}/instances/{instance_id}/configs	√	√
Restarting an instance or clearing instance data	dc:instance:modify Status	PUT /v1.0/{project_id}/instances/status	√	√
Changing the instance password	dc:instance:modify AuthInfo	PUT /v1.0/{project_id}/instances/{instance_id}/password	√	√
Backing up an instance	dc:instance:backup Data	POST /v1.0/{project_id}/instances/{instance_id}/backups	√	√
Restoring an instance	dc:instance:restore Data	POST /v1.0/{project_id}/instances/{instance_id}/restores	√	√
Querying backup records	dc:instance:getDataBackupLog	GET /v1.0/{project_id}/instances/{instance_id}/backups	√	√
Querying restoration records	dc:instance:getDataRestoreLog	GET /v1.0/{project_id}/instances/{instance_id}/restores	√	√
Deleting backup files	dc:instance:deleteDataBackupFile	DELETE /v1.0/{project_id}/instances/{instance_id}/backups/{backup_id}	√	√
Listing background tasks	dc:instance:getBackgroundTask	GET /v1.0/{project_id}/instances/{instance_id}/tasks	√	√
Deleting a background task	dc:instance:deleteBackgroundTask	DELETE /v1.0/{project_id}/instances/{instance_id}/tasks/{task_id}	√	√
Resetting the instance password	dc:instance:resetAuthInfo	-	√	√
Downloading backup files	dc:instance:downloadBackupData	-	√	√

Permissions	Action	API	IA M Pro ject	Ent erp ris e Pro jec t
Migrating data	dc:instance:migrate Data	-	√	√
Web CLI	dc:instance:webcli	-	√	√
Creating a migration task	dc:migrationTask:cr eate	-	√	X
Modifying migration task configurations or stopping a migration task	dc:migrationTask: modify	-	√	X
Deleting a migration task	dc:migrationTask:d elete	-	√	X
Listing migration tasks	dc:migrationTask:li st	-	√	X
Querying details of a data migration task	dc:migrationTask:g et	-	√	X
Diagnosing an instance	dc:instance:diagno sis	-	√	√
Viewing parameter templates	dc:template:list	-	√	X
Creating a parameter template	dc:template:create	-	√	X
Performing a master/standby switchover	dc:instance:swap	-	√	√
Modifying the whitelist of an instance	dc:whitelist:modify	-	√	√

Permissions	Action	API	IA M Pro ject	Ent erp ris e Pro jec t
Obtaining the whitelist of an instance	dc:whitelist:list	-	√	√
Creating a user for accessing an instance	dc:aclaccount:create	-	√	√
Deleting an instance user	dc:aclaccount:delete	-	√	√
Modifying the information about an instance user	dc:aclaccount:modify	-	√	√
Obtaining the list of instance users	dc:aclaccount:list	-	√	√
Querying slow logs	dc:slowlog:list	-	√	√
Viewing parameter templates	dc:template:get	-	√	X
Viewing audit logs	dc:auditlog:get	-	√	√
Querying SSL encryption of an instance	dc:ssl:get	-	√	√
Updating domain names	dc:domainname:rebuild	-	√	√
Switching IP addresses	dc:migrationTask:exchangelp	-	√	X
Rolling back IP address switching	dc:migrationTask:rollbacklp	-	√	X
Killing Redis sessions	dc:clients:kill	-	√	√

Permissions	Action	API	IAM Project	Enterprise Project
Modifying a parameter template	dc:template:modify	-	√	X
Enabling or disabling public domain name resolution	dc:publicdomainname:update	-	√	√
Deleting a parameter template	dc:template:delete	-	√	X
Releasing historical domain names	dc:histroydomainname:release	-	√	√
Upgrading the instance version	dc:instance:upgrade	-	√	√
Analyzing big or hot keys	dc:instance:analyze	-	√	√
Enabling or disabling audit logging	dc:auditlog:modify	-	√	√
Enabling or disabling client IP pass-through	dc:clientiptrans:modify	-	√	√
Modifying SSL encryption for an instance	dc:ssl:modify	-	√	√

# 7 Appendix

## 7.1 Status Codes

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

**Table 7-1** 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.  This provisional response informs the client that part of the request has been received and has not yet been rejected by the server.
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.
201	Created	The request has been fulfilled, resulting in the creation of a new resource.
202	Accepted	The request has been accepted for processing, but the processing has not been completed.
203	Non-Authoritative Information	The server successfully processed the request, but is returning information that may be from another source.

Status Code	Name	Description
204	NoContent	The server has successfully processed the request, but does not return any content. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server successfully processed the request, but is not returning any 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 should be permanently directed 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 a different URI, and should be retrieved using a GET or POST method.
304	Not Modified	The requested resource has not been modified. In such case, there is no need to retransmit the resource since the client still has a previously downloaded copy.
305	Use Proxy	The requested resource is available only through a proxy.
306	Unused	This HTTP status code is no longer used.
400	BadRequest	The request is invalid. The client should modify the request instead of re-initiating it.
401	Unauthorized	The authentication information is incorrect or invalid.
402	Payment Required	Reserved for future use.
403	Forbidden	The request is rejected. The server has received the request and understood it, but the server is refusing to respond to it. The client should not repeat the request without modifications.

Status Code	Name	Description
404	NotFound	The requested resource could not be found. The client should modify the request instead of re-initiating it.
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 could not fulfil the request according to the content characteristics of the request.
407	Proxy Authentication Required	This code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The server timed out waiting for the request. The client may re-initiate the request without modifications at any later time.
409	Conflict	The request cannot be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource is no longer available. The requested resource has been deleted permanently.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The request is larger than the server is willing or able to process. The server may close the connection to prevent the client from continuing the request. If the server temporarily cannot process the request, the response will contain a Retry-After header field.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server does not support the media type in the request.

Status Code	Name	Description
416	Requested range not satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request was well-formed but was unable to be followed 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, it is advisable for the client to 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. It is advisable for the client to modify the request instead of re-initiating the request.
504	ServerTimeout	The server could not return a timely response. The response will reach the client only if the request carries a timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

## 7.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	111400002	Invalid project ID format.	Invalid project ID format.	Check whether the project ID is valid.
400	111400004	Empty request body.	Empty request body.	Check whether mandatory parameters in the request are set.



Status Code	Error Codes	Error Message	Description	Solution
400	111400005	The message body contains invalid characters or is not in JSON format.	The message body contains invalid characters or is not in JSON format.	Check whether the request parameters are valid.
400	111400007	The selected cache engine type is not supported.	The selected cache engine type is not supported.	Check whether the request parameters are valid.
400	111400008	The selected cache engine version is not supported.	The selected cache engine version is not supported.	Check whether the request parameters are valid.
400	111400009	Invalid product ID in the request.	Invalid product ID in the request.	Check whether the request parameters are valid.
400	111400010	Invalid DCS instance name. The name must be 4 to 64 characters in length. Only letters (case-insensitive), digits, underscores (_), and hyphens (-) are allowed.	Invalid instance name. The name can contain 4 to 64 characters. Only letters, digits, underscores (_), and hyphens (-) are allowed.	Check whether the request parameters are valid.
400	111400011	DCS instance description cannot exceed 1024 characters.	DCS instance description cannot exceed 1024 characters.	Check whether the request parameters are valid.
400	111400012	Invalid capacity parameter in the request.	Invalid capacity parameter in the request.	Check whether the request parameters are valid.
400	111400013	Invalid vpc_id in the request.	Invalid vpc_id in the request.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	111400014	Invalid security_group_id in the request.	Invalid security_group_id in the request.	Check whether the request parameters are valid.
400	111400016	Invalid subnet_id in the request.	Invalid subnet_id in the request.	Check whether the request parameters are valid.
400	111400017	This DCS instance job task is still running.	This DCS instance job task is still running.	Try again later.
400	111400018	This subnet must exist in the VPC.	This subnet must exist in the VPC.	Check whether the request parameters are valid.
400	111400019	The password does not meet complexity requirements.	The password does not meet complexity requirements.	Check whether the request parameters are valid.
400	111400020	DHCP must be enabled for this subnet.	DHCP must be enabled for this subnet.	Check whether DHCP has been enabled.
400	111400021	The isAutoRenew parameter in the request must be either 0 or 1.	The isAutoRenew parameter in the request must be either 0 or 1.	Check whether the request parameters are valid.
400	111400022	Engine does not match the product id.	The cache engine does not match the product ID.	Check whether the request parameters are valid.
400	111400026	This operation is not allowed when the DCS instance is in the current state.	This operation is not allowed when the DCS instance is in the current state.	Try again later or contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	111400027	This operation is not supported on this node.	This operation is not supported on this node.	Try again later or contact technical support.
400	111400035	DCS instance quota of the tenant is insufficient.	DCS instance quota of the tenant is insufficient.	Contact technical support.
400	111400036	Memory quota of the tenant is insufficient.	Memory quota of the tenant is insufficient.	Contact technical support.
400	111400037	The instanceParams parameter in the request contains invalid characters or is not in JSON format.	The instanceParams parameter in the request contains invalid characters or is not in JSON format.	Check whether the request parameters are valid.
400	111400038	The periodNum parameter in the request must be an integer.	The periodNum parameter in the request must be an integer.	Check whether the request parameters are valid.
400	111400039	The quota limit has been reached.	The quota limit has been reached.	Check whether the request parameters are valid.
400	111400042	This AZ does not exist.	This AZ does not exist.	Check whether the request parameters are valid.
400	111400045	This DCS instance is already unfrozen.	This DCS instance is already unfrozen.	Check whether the request parameters are valid.
400	111400046	This security group does not exist.	This security group does not exist.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	111400047	The periodType parameter in the request must be either 2 or 3.	The periodType parameter in the request must be either 2 or 3.	Check whether the request parameters are valid.
400	111400048	The security group must have both outbound and inbound rules with protocols set to ANY.	The security group must have both outbound and inbound rules with protocols set to ANY.	Check whether the request parameters are valid.
400	111400053	the upgrade instance version equals to current version.	The targetVersion parameter in the request cannot be the same as the source version.	Check whether the request parameters are valid.
400	111400054	the selected available zone quota not enough.	DCS resources in the selected AZ have been sold out.	Select another AZ or contact technical support.
400	111400060	This DCS instance name already exists.	This DCS instance name already exists.	Check whether the request parameters are valid.
400	111400061	Invalid instance ID format.	Invalid instance ID format.	Check whether the request parameters are valid.
400	111400062	Invalid {0} parameter in the request.	Invalid {0} parameter in the request.	Check whether the request parameters are valid.
400	111400063	Invalid {0} parameter in the request.	Invalid {0} parameter in the request.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	111400064	The action parameter in the request must be start, stop, or restart.	The action parameter in the request must be start, stop, or restart.	Check whether the request parameters are valid.
400	111400065	The instances parameter in the request cannot be a null value or left unspecified.	The instances parameter in the request cannot be a null value or left unspecified.	Check whether the request parameters are valid.
400	111400066	Invalid value of the configure parameter {0}.	Invalid value of the configure parameter {0}.	Check whether the request parameters are valid.
400	111400067	The available_zones parameter in the request must an array that contains only one AZ ID.	The available_zones parameter in the request must an array that contains only one AZ ID.	Check whether the request parameters are valid.
400	111400068	This VPC does not exist.	This VPC does not exist.	Check whether the request parameters are valid.
400	111400070	Invalid task ID format.	Invalid task ID format.	Check whether the request parameters are valid.
400	111400072	Invalid saveDays instance backup policy parameter in the request.	Invalid saveDays instance backup policy parameter in the request.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	111400073	Invalid backupType instance backup policy parameter in the request.	Invalid backupType instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	111400074	Invalid periodType instance backup policy parameter in the request.	Invalid periodType instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	111400075	Invalid backupAt instance backup policy parameter in the request.	Invalid backupAt instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	111400076	Invalid beginAt instance backup policy parameter in the request.	Invalid beginAt instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	111400080	Instance password verify failed.	Instance password verify failed.	Check whether the request parameters are valid.
400	111400086	only master standby instance is support this action	This operation is allowed only for master/standby instances.	Operation not allowed.
400	111400087	the backup record status is err when restore this instance	The restoration operation is allowed only when the backup task succeeded.	Try again later or contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	111400094	the system is not support dcs job.	The system does not support the background task function.	Operation not allowed.
400	111400095	the system is not support backup and restore.	The system does not support the backup and restoration function.	Operation not allowed.
400	111400096	the instance is backuping.	Backing up the instance... Please try again later.	Try again later.
400	111400097	the instance is restoring.	Restoring the instance... Please try again later.	Try again later.
400	111400098	The value of the remark parameter must be 0 to 128 characters in length.	The value of the remark parameter must be 0 to 128 characters in length.	Check whether the request parameters are valid.
400	111400099	DCS instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	DCS instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	Try again later.
400	111400100	The number of instance IDs in an instances array cannot exceed 50.	The number of instance IDs in an instances array cannot exceed 50.	Check whether the request parameters are valid.
400	111400102	The system is not support resize.	Scale-up is not supported.	Operation not allowed.

Status Code	Error Codes	Error Message	Description	Solution
400	111400103	The system is not support resize.	The capacity to which the instance is scaled up must be greater than the original capacity.	Check whether the request parameters are valid.
400	111400104	The DCS instance is recovering from an internal fault. Please try again later or contact customer service.	The DCS instance is recovering from an internal fault. Please try again later or contact customer service.	Try again later or contact technical support.
400	111400105	The value of reserved-memory cannot be greater than the free memory size of this DCS instance.	The value of reserved-memory cannot be greater than the free memory size of this DCS instance.	Check whether the request parameters are valid.
400	111400106	The value of maintain time illegal.	Invalid maintenance time window.	Check whether the request parameters are valid.
400	111400107	The instance exists for unpaid scale up orders. Please process non payment orders first.	This instance has unpaid scale-up orders. Please process the orders before continuing.	Process unpaid orders before continuing.
400	111400108	The Instance exists for processing scale up order. Please try again later.	Scaling up the instance... Please try again later.	Try again later or contact technical support.



Status Code	Error Codes	Error Message	Description	Solution
400	111400111	the instance is restarting.	Restarting the instance... Please try again later.	Try again later or contact technical support.
400	111400113	the instance is extending.	Scaling up the instance... Please try again later.	Try again later or contact technical support.
400	111400114	the instance is configuring.	Modifying instance configuration.. . Please try again later.	Try again later or contact technical support.
400	111400115	the instance is changing the password.	The password is being changed. Try again later.	Try again later or contact technical support.
400	111400116	the instance is upgrading.	Upgrading the instance... Please try again later.	Try again later or contact technical support.
400	111400117	the instance is rollbacking the version.	Rolling back the instance... Please try again later.	Try again later or contact technical support.
400	111400118	the instance is creating.	Creating the instance... Please try again later.	Try again later or contact technical support.
400	111400119	Query Bill Sample failed	The instance does not exist.	Check whether the request parameters are valid.
400	111400120	the instance is Freezing.	Freezing the instance... Please try again later.	Try again later or contact technical support.
400	111400800	Invalid {0} in the request.	Invalid {0} in the request.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	111400843	The no_password_access parameter is missing or its value is invalid.	The no_password_access parameter is missing or its value is invalid.	Check whether the request parameters are valid.
400	111400844	The access_user parameter is missing or its value is invalid.	The access_user parameter is missing or its value is invalid.	Check whether the request parameters are valid.
400	111400845	The password parameter is missing or its value is invalid.	The password parameter is missing or its value is invalid.	Check whether the request parameters are valid.
400	111400849	The request parameter new_password should not exist.	The request parameter new_password should not exist.	Check whether the request parameters are valid.
400	111400850	This operation is not supported when Password-Free Access is enabled for the instance.	This operation is not supported when Password-Free Access is enabled for the instance.	Reset the instance password.
400	DCS. 4855	Master standby swap is not supported.	Master/standby switchover is not supported.	Operation not allowed.
400	DCS.4002	Invalid project ID format.	Invalid project ID format.	Check whether the request parameters are valid.
400	DCS.4004	Empty request body.	Empty request body.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4005	The message body contains invalid characters or is not in JSON format.	The message body contains invalid characters or is not in JSON format.	Check whether the request parameters are valid.
400	DCS.4006	The selected cache engine type is not supported.	The selected cache engine type is not supported.	Check whether the request parameters are valid.
400	DCS.4007	Instance type is not supported.	Instance type is not supported.	Check whether the request parameters are valid.
400	DCS.4008	The selected cache engine version is not supported.	The selected cache engine version is not supported.	Check whether the request parameters are valid.
400	DCS.4009	Invalid product ID in the request.	Invalid product ID in the request.	Check whether the request parameters are valid.
400	DCS.4010	Invalid DCS instance name. The name must be 4 to 64 characters in length. Only letters (case-insensitive), digits, underscores (_), and hyphens (-) are allowed.	Invalid DCS instance name. The name must be 4 to 64 characters in length. Only letters (case-insensitive), digits, underscores (_), and hyphens (-) are allowed.	Check whether the request parameters are valid.
400	DCS.4011	DCS instance description cannot exceed 1024 characters.	DCS instance description cannot exceed 1024 characters.	Check whether the request parameters are valid.
400	DCS.4012	Invalid capacity parameter in the request.	Invalid capacity parameter in the request.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4013	Invalid vpc_id in the request.	Invalid vpc_id in the request.	Check whether the request parameters are valid.
400	DCS.4014	Invalid security_group_id in the request.	Invalid security_group_id in the request.	Check whether the request parameters are valid.
400	DCS.4016	Invalid subnet_id in the request.	Invalid subnet_id in the request.	Check whether the request parameters are valid.
400	DCS.4017	This DCS instance job task is still running.	This DCS instance job task is still running.	Try again later.
400	DCS.4018	This subnet must exist in the VPC.	This subnet must exist in the VPC.	Check whether the request parameters are valid.
400	DCS.4019	The password does not meet complexity requirements.	The password does not meet complexity requirements.	Check whether the request parameters are valid.
400	DCS.4020	DHCP must be enabled for this subnet.	DHCP must be enabled for this subnet.	Check whether DHCP has been enabled.
400	DCS.4021	The isAutoRenew parameter in the request must be either 0 or 1.	The isAutoRenew parameter in the request must be either 0 or 1.	Check whether the request parameters are valid.
400	DCS.4022	Engine does not match the product id.	The cache engine does not match the product ID.	Check whether the request parameters are valid.
400	DCS.4025	The end time must be after the start time.	The end time must be after the start time.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4026	This operation is not allowed when the DCS instance is in the current state.	This operation is not allowed when the DCS instance is in the current state.	Try again later or contact technical support.
400	DCS.4027	This operation is not supported on this node.	This operation is not supported on this node.	Try again later or contact technical support.
400	DCS.4028	The diagnosis time range is max 10 minutes.	The diagnosis time range is max 10 minutes.	Check whether the request parameters are valid.
400	DCS.4030	The start time must be within the last seven days.	The start time must be within the last seven days.	Check whether the request parameters are valid.
400	DCS.4031	The start time must be before than the current server time.	The start time must be before than the current server time.	Check whether the request parameters are valid.
400	DCS.4033	The start time must be after the instance start time.	The start time must be after the instance start time.	Check whether the request parameters are valid.
400	DCS.4035	DCS instance quota of the tenant is insufficient.	DCS instance quota of the tenant is insufficient.	Contact technical support.
400	DCS.4036	Memory quota of the tenant is insufficient.	Memory quota of the tenant is insufficient.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4037	The instanceParams parameter in the request contains invalid characters or is not in JSON format.	The instanceParams parameter in the request contains invalid characters or is not in JSON format.	Check whether the request parameters are valid.
400	DCS.4038	The periodNum parameter in the request must be an integer.	The periodNum parameter in the request must be an integer.	Check whether the request parameters are valid.
400	DCS.4039	The quota limit has been reached.	The quota limit has been reached.	Check whether the request parameters are valid.
400	DCS.4042	This AZ does not exist.	This AZ does not exist.	Check whether the request parameters are valid.
400	DCS.4045	This DCS instance is already unfrozen.	This DCS instance is already unfrozen.	Try again later or contact technical support.
400	DCS.4046	This security group does not exist.	This security group does not exist.	Check whether the request parameters are valid.
400	DCS.4047	The periodType parameter in the request must be either 2 or 3.	The periodType parameter in the request must be either 2 or 3.	Check whether the request parameters are valid.
400	DCS.4048	The security group must have both outbound and inbound rules with protocols set to ANY.	The security group must have both outbound and inbound rules with protocols set to ANY.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4049	The instance status is not running.	The instance status is not running.	Contact technical support.
400	DCS.4053	the upgrade instance version equals to current version.	The targetVersion parameter in the request cannot be the same as the source version.	Check whether the request parameters are valid.
400	DCS.4054	the selected available zone quota not enough.	DCS resources in the selected AZ have been sold out.	Select another AZ or contact technical support.
400	DCS.4060	This DCS instance name already exists.	This DCS instance name already exists.	Check whether the request parameters are valid.
400	DCS.4061	Invalid instance ID format.	Invalid instance ID format.	Check whether the request parameters are valid.
400	DCS.4062	Invalid {0} parameter in the request.	Invalid {0} parameter in the request.	Check whether the request parameters are valid.
400	DCS.4063	Invalid {0} parameter in the request.	Invalid {0} parameter in the request.	Check whether the request parameters are valid.
400	DCS.4064	The action parameter in the request must be start, stop, or restart.	The action parameter in the request must be start, stop, or restart.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4065	The instances parameter in the request cannot be a null value or left unspecified.	The instances parameter in the request cannot be a null value or left unspecified.	Check whether the request parameters are valid.
400	DCS.4066	Invalid value of the configure parameter {0}.	Invalid value of the configure parameter {0}.	Check whether the request parameters are valid.
400	DCS.4067	The available_zones parameter in the request must an array that contains only one AZ ID.	The available_zones parameter in the request must an array that contains only one AZ ID.	Check whether the request parameters are valid.
400	DCS.4068	This VPC does not exist.	This VPC does not exist.	Check whether the request parameters are valid.
400	DCS.4070	Invalid task ID format.	Invalid task ID format.	Check whether the request parameters are valid.
400	DCS.4072	Invalid saveDays instance backup policy parameter in the request.	Invalid saveDays instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	DCS.4073	Invalid backupType instance backup policy parameter in the request.	Invalid backupType instance backup policy parameter in the request.	Check whether the request parameters are valid.



Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4074	Invalid periodType instance backup policy parameter in the request.	Invalid periodType instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	DCS.4075	Invalid backupAt instance backup policy parameter in the request.	Invalid backupAt instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	DCS.4076	Invalid beginAt instance backup policy parameter in the request.	Invalid beginAt instance backup policy parameter in the request.	Check whether the request parameters are valid.
400	DCS.4080	Instance password verify failed.	Instance password verify failed.	Check whether the request parameters are valid.
400	DCS.4086	only master standby instance is support this action	This operation is allowed only for master/standby instances.	Operation not allowed.
400	DCS.4087	the backup record status is err when restore this instance	The restoration operation is allowed only when the backup task succeeded.	Try again later or contact technical support.
400	DCS.4094	the system is not support dcs job.	The system does not support the background task function.	Operation not allowed.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4095	the system is not support backup and restore.	The system does not support the backup and restoration function.	Operation not allowed.
400	DCS.4096	the instance is backuping.	Backing up the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4097	the instance is restoring.	Restoring the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4098	The value of the remark parameter must be 0 to 128 characters in length.	The value of the remark parameter must be 0 to 128 characters in length.	Check whether the request parameters are valid.
400	DCS.4099	DCS instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	DCS instances in the Creating, Starting, Stopping, or Restarting state cannot be deleted.	Try again later.
400	DCS.4100	The number of instance IDs in an instances array cannot exceed 50.	The number of instance IDs in an instances array cannot exceed 50.	Check whether the request parameters are valid.
400	DCS.4102	The system is not support resize.	The system is not support resize.	Operation not allowed.
400	DCS.4103	The system is not support resize.	The system is not support resize.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4104	The DCS instance is recovering from an internal fault. Please try again later or contact customer service.	The DCS instance is recovering from an internal fault. Please try again later or contact customer service.	Try again later or contact technical support.
400	DCS.4105	The value of reserved-memory cannot be greater than the free memory size of this DCS instance.	The value of reserved-memory cannot be greater than the free memory size of this DCS instance.	Check whether the request parameters are valid.
400	DCS.4106	The value of maintain time illegal.	The value of maintain time illegal.	Check whether the request parameters are valid.
400	DCS.4107	The instance exists for unpaid scale up orders. Please process non payment orders first.	The instance exists for unpaid scale up orders. Please process non payment orders first.	Process unpaid orders before continuing.
400	DCS.4108	The Instance exists for processing scale up order. Please try again later.	The Instance exists for processing scale up order. Please try again later.	Try again later or contact technical support.
400	DCS.4111	the instance is restarting.	Restarting the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4113	the instance is extending.	Scaling up the instance... Please try again later.	Try again later or contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4114	the instance is configuring.	Modifying instance configuration.. . Please try again later.	Try again later or contact technical support.
400	DCS.4115	the instance is changing the password.	The password is being changed. Try again later.	Try again later or contact technical support.
400	DCS.4116	the instance is upgrading.	Upgrading the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4117	the instance is rollbacking the version.	Rolling back the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4118	the instance is creating.	Creating the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4119	Query Bill Sample failed	The instance does not exist.	Check whether the request parameters are valid.
400	DCS.4120	the instance is Freezing.	Freezing the instance... Please try again later.	Try again later or contact technical support.
400	DCS.4200	Instance type cannot be changed.	Instance type cannot be changed.	Check whether the request parameters are valid.
400	DCS.4253	All replicas have a priority of 0.	All replicas have a priority of 0.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4300	Client IP transparent transmission is being processed, please do not submit it repeatedly.	Client IP transparent transmission is being processed, please do not submit it repeatedly.	Client IP pass-through is being enabled or disabled.
400	DCS.4800	Invalid {0} in the request.	Invalid {0} in the request.	Check whether the request parameters are valid.
400	DCS.4819	The first_scan_at parameter is invalid. Its must be ISO format utc date-time. The time must be later than the current time.	first_scan_at must be ISO format utc date-time. The time must be later than the current time.	Check whether the request parameters are valid. Example of the ISO UTC format: "2021-08-18T07:33:00.000Z"
400	DCS.4820	The interval parameter is invalid. must Greater than or equal to 0.	The value of interval is invalid. It must be greater than or equal to 0 seconds.	Check whether the request parameters are valid.
400	DCS.4821	The timeout parameter is invalid. Its must Greater than or equal to interval * 2, if interval is 0, timeout must Greater than 1 second.	The value of the timeout parameter is invalid. The value must be greater than 0 and at least twice the scanning interval.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4822	The scan_keys_count parameter is invalid. Its must Greater than or equal to 10, and Less than or equal to 1000.	The value of the scan_keys_count parameter is invalid. The value range is from 10 to 1000.	Check whether the request parameters are valid.
400	DCS.4838	Do not support feature client ip transparent transmission.	Client IP pass-through is not supported.	Client IP pass-through is not enabled.
400	DCS.4839	Do not support feature public dns.	Public domain name resolution is not supported.	Public domain name resolution is not enabled.
400	DCS.4840	Do not support feature dns.	Domain name resolution is not supported.	Domain name resolution is disabled.
400	DCS.4841	Instance do not support client ip transparent transmission.	The instance does not support client IP pass-through.	The instance version does not support client IP pass-through.
400	DCS.4843	The no_password_access parameter is missing or its value is invalid.	The no_password_access parameter is missing or its value is invalid.	Check whether the request parameters are valid.
400	DCS.4844	The access_user parameter is missing or its value is invalid.	The access_user parameter is missing or its value is invalid.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4845	The password parameter is missing or its value is invalid.	The password parameter is missing or its value is invalid.	Check whether the request parameters are valid.
400	DCS.4846	Client ip transparent transmission is already closed,please do not repeat the operation.	Client IP pass-through is already disabled.	Client IP pass-through is disabled.
400	DCS.4847	Client ip transparent transmission is already opened,please do not repeat the operation.	Client IP pass-through is already enabled.	Client IP pass-through is enabled.
400	DCS.4848	Client Management is not supported.	Session management is not supported.	Operation not allowed.
400	DCS.4849	The request parameter new_password should not exist.	The request parameter new_password should not exist.	Check whether the request parameters are valid.
400	DCS.4850	This operation is not supported when Password-Free Access is enabled for the instance.	This operation is not supported when Password-Free Access is enabled for the instance.	Check whether the request parameters are valid.
400	DCS.4875	Create replication number exceed max number limit.	The maximum number of replicas that can be created has been reached.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4879	r/w instance have only one repl can not remove ip from dns	The IP address cannot be removed because a master/standby instance must have at least one replica IP address.	Check whether the request parameters are valid.
400	DCS.4911	The network ip insufficient.	The subnet does not have sufficient IP addresses.	Check the quantity of IP addresses in the subnet. Release IP addresses that are no longer used, or use another subnet that has sufficient IP addresses.
400	DCS.4918	Instance bigkey analyze is running.	The big key analysis is in progress.	Try again later.
400	DCS.4919	Does not support bigkey analyze.	Big key analysis is not supported.	Operation not allowed.
400	DCS.4927	The param spec_code is invalid	The param spec_code is invalid	Check whether the request parameters are valid.
400	DCS.4930	The request param node_list is invalid	Invalid node_list parameter in the request.	Check whether the request parameters are valid.
400	DCS.4931	Node is not replica, can't delete.	The replica cannot be deleted because it is not a read-only replica.	Check whether the request parameters are valid.



Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4935	Only one slave replication has dns ip, can not delete	The replica cannot be deleted because at least one DNS IP address must be retained.	Check whether the request parameters are valid.
400	DCS.4936	The master node cannot be deleted	The master node cannot be deleted.	Check whether the request parameters are valid.
400	DCS.4937	Only has one slave node, can not delete	Retain at least one replica in addition to the master.	Check whether the request parameters are valid.
400	DCS.4939	The param slave_priority_weight is invalid.	Invalid slave_priority_weight parameter in the parameter.	Check whether the request parameters are valid.
400	DCS.4941	The hotkey id does not exist.	The hot key analysis task ID does not exist.	Check whether the request parameters are valid.
400	DCS.4942	The bigkey id does not exist.	The big key analysis task ID does not exist.	Check whether the request parameters are valid.
400	DCS.4957	This operation is not allowed when the task is in the current state.	This operation is not allowed when the task is in the current state.	Only tasks in the successful state support this operation.
400	DCS.4998	Domain names are up to date.	The domain name has already been updated.	The domain name has already been updated.

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.4999	Do not support feature update domain name.	Domain name update is not supported.	Domain name optimization is not enabled.
401	111401001	Invalid token.	Invalid token.	Check whether the request parameters are valid.
401	111401002	Token expired.	Token expired.	Check whether the request parameters are valid.
401	111401003	No token in the request.	No token in the request.	Check whether the request parameters are valid.
401	111401004	Project ID does not match the token.	Project ID does not match the token.	Check whether the request parameters are valid.
401	DCS.1001	Invalid token.	Invalid token.	Check whether the request parameters are valid.
401	DCS.1002	Token expired.	Token expired.	Check whether the request parameters are valid.
401	DCS.1003	No token in the request.	No token in the request.	Check whether the request parameters are valid.
401	DCS.1004	Project ID does not match the token.	Project ID does not match the token.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
403	111403002	This tenant has read permission only and cannot perform this operation.	This tenant has read permission only and cannot perform this operation.	Check whether the request parameters are valid.
403	111403003	This role does not have the permission to perform this operation.	This role does not have the permission to perform this operation.	Check whether the request parameters are valid.
403	DCS.2003	This role does not have the permission to perform this operation.	This role does not have the permission to perform this operation.	Check whether the request parameters are valid.
403	DCS.2007	Policy does not allow {} to be performed.	Insufficient permissions.	Check whether the account has the required operation permissions.
403	DCS.3002	This tenant has read permission only and cannot perform this operation.	This tenant has read permission only and cannot perform this operation.	Check whether the request parameters are valid.
403	DCS.3003	This role does not have the permission to perform this operation.	This role does not have the permission to perform this operation.	Check whether the request parameters are valid.
404	111404001	The requested URL does not exist.	The requested URL does not exist.	Check whether the request parameters are valid.
404	111404022	This DCS instance does not exist.	This DCS instance does not exist.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
404	111404023	This DCS order does not exist.	This DCS order does not exist.	Check whether the request parameters are valid.
404	DCS.3022	This DCS instance does not exist.	This DCS instance does not exist.	Check whether the request parameters are valid.
404	DCS.4001	The requested URL does not exist.	The requested URL does not exist.	Check whether the request parameters are valid.
404	DCS.4023	This DCS order does not exist.	This DCS order does not exist.	Check whether the request parameters are valid.
404	DCS.5101	Create agency failed.	Create agency failed.	Try again later or contact technical support.
405	111405001	This request method is not allowed.	This request method is not allowed.	Check whether the request parameters are valid.
405	DCS.5001	This request method is not allowed.	This request method is not allowed.	Check whether the request parameters are valid.
500	111400069	Another user is modifying configuration parameters of the DCS instance. Please try again later.	Another user is modifying configuration parameters of the DCS instance. Please try again later.	Try again later.
500	111400101	Delete instance backup file failed.	The instance backup file fails to be deleted.	Contact technical support.
500	111400842	job execution status failed.	Failed to run the task.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	111500000	Internal service error.	Internal service error.	Contact technical support.
500	111500006	Internal service error.	Internal service error.	Contact technical support.
500	111500017	Internal service error.	Internal service error.	Contact technical support.
500	111500020	vm add port fail	Failed to add a port for the VM.	Contact technical support.
500	111500024	Internal service error.	Internal service error.	Contact technical support.
500	111500031	create instance fail	Failed to create a DCS instance.	Contact technical support.
500	111500032	Internal service error.	Internal service error.	Contact technical support.
500	111500037	query order info fail	query order info fail	Try again later or contact technical support.
500	111500041	No resource tenant available.	No resource tenant available.	Try again later or contact technical support.
500	111500044	update resource status fail	Failed to update the status of the instance.	Try again later or contact technical support.
500	111500053	Internal service error.	Internal service error.	Contact technical support.
500	111500054	Internal service error.	Internal service error.	Contact technical support.
500	111500070	Internal service error.	Internal service error.	Contact technical support.
500	111500071	Internal service error.	Internal service error.	Contact technical support.
500	111500077	Internal service error.	Internal service error.	Contact technical support.
500	111500078	Internal service error.	Internal service error.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	111500079	Internal service error.	Internal service error.	Contact technical support.
500	111500082	Internal service error.	Internal service error.	Contact technical support.
500	111500083	Internal service error.	Internal service error.	Contact technical support.
500	111500085	Internal service error.	Internal service error.	Contact technical support.
500	111500090	Internal service error.	Internal service error.	Contact technical support.
500	111500091	Internal service error.	Internal service error.	Contact technical support.
500	111500092	Internal service error.	Internal service error.	Contact technical support.
500	111500095	Internal service error.	Internal service error.	Contact technical support.
500	111500104	Internal service error.	Internal service error.	Contact technical support.
500	DCS. 5094	Master standby swap failed.	Master/standby switchover failed.	Contact technical support.
500	DCS.4069	Another user is modifying configuration parameters of the DCS instance. Please try again later.	Another user is modifying configuration parameters of the DCS instance. Please try again later.	Try again later.
500	DCS.4101	Delete instance backup file failed.	The instance backup file fails to be deleted.	Contact technical support.
500	DCS.4842	job execution status failed.	Failed to run the task.	Contact technical support.
500	DCS.5000	Internal service error.	Internal service error.	Contact technical support.
500	DCS.5006	Submit job failed.	Submission failed.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	DCS.5017	Failed to save instance information.	Failed to save the instance information.	Contact technical support.
500	DCS.5020	vm add port fail	Failed to add a port for the VM.	Contact technical support.
500	DCS.5024	Query instance failed.	Failed to query the instance.	Contact technical support.
500	DCS.5031	create instance fail	Failed to create a DCS instance.	Contact technical support.
500	DCS.5032	Failed to create order.	Failed to create the order.	Contact technical support.
500	DCS.5037	query order info fail	Failed to query the order details.	Contact technical support.
500	DCS.5039	Obtain IAM service failed.	Obtain IAM service failed.	Contact technical support.
500	DCS.5040	Call IAM API for querying agency failed.	Call IAM API for querying agency failed.	Contact technical support.
500	DCS.5041	No resource tenant available.	No resource tenant available.	Contact technical support.
500	DCS.5042	Call IAM API for creating agency failed.	Call IAM API for creating agency failed.	Contact technical support.
500	DCS.5043	Call IAM API for querying permission failed.	Call IAM API for querying permission failed.	Contact technical support.
500	DCS.5044	update resource status fail	Failed to update the status of the instance.	Contact technical support.

Status Code	Error Codes	Error Message	Description	Solution
500	DCS.5045	Call IAM API for adding project-level agency permissions failed.	Call IAM API for adding project-level agency permissions failed.	Contact technical support.
500	DCS.5053	Instance node not found.	Instance node not found.	Contact technical support.
500	DCS.5054	Failed to generate password.	Failed to generate a password.	Contact technical support.
500	DCS.5070	Internal service error.	Internal service error.	Contact technical support.
500	DCS.5071	Failed to create instance backup strategy.	Failed to create the instance backup policy.	Contact technical support.
500	DCS.5077	Query instance failed.	Failed to query the instance backup policy.	Contact technical support.
500	DCS.5078	Query backup record failed.	Failed to query the backup record.	Contact technical support.
500	DCS.5079	Query group node failed.	Failed to query the restoration record.	Contact technical support.
500	DCS.5081	The resource tenant does not exist.	The resource tenant does not exist.	Contact technical support.
500	DCS.5082	Failed to register resource tenant backup user.	Failed to register the resource tenant backup user.	Contact technical support.
500	DCS.5083	Failed to save backup user.	The backup user fails to be saved.	Contact technical support.



Status Code	Error Codes	Error Message	Description	Solution
500	DCS.5085	Failed to update backup strategy.	The backup policy fails to be updated.	Contact technical support.
500	DCS.5090	Failed to save backup information.	The backup information fails to be saved.	Contact technical support.
500	DCS.5091	Script execution failed.	Script execution failed.	Contact technical support.
500	DCS.5092	Failed to save and restore data.	Failed to save and restore data.	Contact technical support.
500	DCS.5095	The script execution failed and needs to be retried.	Script execution failed and needs to be retried.	Contact technical support.
500	DCS.5104	Failed to modify order.	Failed to modify the order.	Contact technical support.
400	DCS.4202	ssl request params are invalid.	ssl request params are invalid.	Check whether the request parameters are valid.
400	DCS.4933	The param available_zones is invalid.	Check available_zones are valid.	Check whether the request parameters are valid.
400	DCS.5050	Shared VPCs are not supported.	Not Supported shared vpc.	Check whether the request parameters are valid.

## 7.3 Obtaining a Project ID

### Obtaining a Project ID by Calling an API

You can obtain a project ID by calling the API used to query project information based on the specified criteria.

The API used to obtain a project ID is **GET https://{Endpoint}/v3/projects**. {Endpoint} is the IAM endpoint and can be obtained from the administrator. 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": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

## Obtaining a Project ID from the Console

A project ID is required for some URLs when an API is called.

To obtain a project ID, perform the following operations:

- Step 1** Sign up and log in to the management console.
- Step 2** Click the username in the upper right corner and choose **My Credentials** from the drop-down list.
- Step 3** On the **My Credentials** page, view project IDs in the project list.

----End

## 7.4 Obtaining the Account Name and Account ID

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

1. Register an account and log in to the console.
2. Click the username and choose **My Credentials** from the drop-down list.
3. On the **My Credentials** page, view the **Account Name** and **Account ID**.

## 7.5 DCS Instance Statuses

**Table 7-2** DCS instance statuses

State	Description
CREATING	Creating is the status before the Running state.
CREATEFAILED	The DCS instance failed to be created.
RUNNING	The instance is running properly. Only instances in the Running state can provide in-memory cache service.
ERROR	The instance is not running properly.
RESTARTING	The instance is being restarted.
EXTENDING	The instance is being scaled up.
RESTORING	The instance data is being restored.

## 7.6 Instance Diagnosis IDs

**Table 7-3** cause\_ids

ID	Type	Description
1	cause	The number of connected clients exceeds {THRESHOLD}.
2	cause	The instantaneous traffic is too high.
3	cause	The underlying disk is abnormal.
4	cause	Data persistence failed.
5	cause	Memory usage exceeds {THRESHOLD}.
6	cause	RDB persistence is enabled. Memory usage exceeds {THRESHOLD}.
7	cause	Excessive memory fragmentation.
8	cause	Cache hit rate is lower than {THRESHOLD}.

ID	Type	Description
9	cause	Too many keys have expired at the same time.
10	cause	The following commands with time complexity O(N) are executed: {COMMANDS}
11	cause	CPU usage exceeds {THRESHOLD}.
12	cause	Data is persisted.
13	cause	QPS has increased.

**Table 7-4** impact\_ids

ID	Type	Description
1	impact	Redis connections will be refused.
2	impact	Redis will be disconnected.
3	impact	Redis responses will slow down.
4	impact	RDB persistence will fail.
5	impact	Cache hit ratio will decrease.
6	impact	AOF persistence will fail.

**Table 7-5** advice\_ids

ID	Type	Description
1	advice	Retrieve connections from the connection pool.
2	advice	Use read/write splitting or a cluster.
3	advice	Expand the capacity of the instance.

ID	Type	Description
4	advice	Manually run the <b>MEMORY PURGE</b> command during low-demand hours.
5	advice	Check the Redis usage or reduce the cache granularity to avoid memory eviction.
6	advice	Set different expiration time for the keys.
7	advice	Do not use commands with time complexity of $O(N)$ .