

Distributed Cache Service

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.

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 support 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).
 - For details about how to access DCS Redis instances through clients in various languages, see [Accessing a DCS Redis Instance](#).
-

Endpoints

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

Concepts

- Account
An account is created upon successful registration with Huawei Cloud. 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

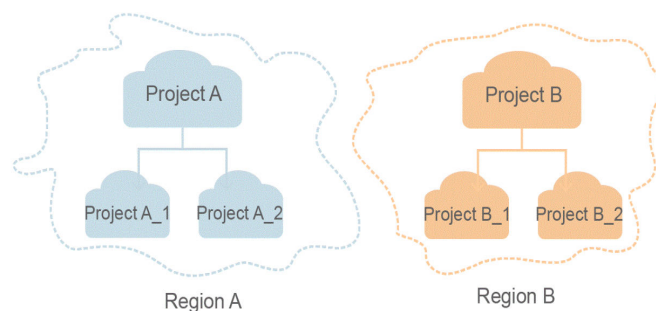
An IAM user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).

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

- Regions are defined by their geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), and Object Storage Service (OBS), are shared within the same region. AZs in the same region can communicate with each other over an intranet, but AZs in different regions cannot. You can use cloud services in locations that meet your requirements. For example, you can design applications in a location that is close to your customers or that meets specific requirements.
- 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 purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

Figure 1-1 Project isolating model



2 API Overview

Table 2-1 APIs provided by DCS

Type	Description
Lifecycle management APIs	Create, query, delete, modify, and scale instances.
Instance management APIs	Restart instances, query instance status, change passwords, and query instance statistics.
Shard and replica management APIs	Add replicas, configure replica priority, and query shard details.
Parameter management APIs	Query and modify instance configuration parameters.
Backup and restoration APIs	Back up and restore instances, and view backup and restoration records.
Data migration APIs	Create data migration tasks.
Tag management APIs	Add and delete tags, query tags of a specified instance, and query tags of a tenant.
Cache analysis APIs	Configure and query big key and hot key analysis tasks.
Log management APIs	Query slow query logs.
IP whitelist Management APIs	Configure and query IP whitelist groups of an instance.
Background task management APIs	Query and delete background tasks.
Instance diagnosis APIs	Query AZ information, product specifications, and maintenance time windows.
Other APIs	Query product specifications, maintenance time windows, and AZs.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI is in the following format:

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

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

- **URI-scheme:** Protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** domain name or IP address of the server running the REST service. The endpoint varies between services in different regions and can be obtained from Regions and Endpoints. For example, the endpoint of IAM in the **EU-Dublin** region is **iam.eu-west-101.myhuaweicloud.com**.
- **resource-path:** API access path. Obtain the value from the URI of an API. For example, **resource-path** of the API used to create an IAM user as the administrator is **/v3.0/OS-USER/users**.
- **query-string:** Query parameter, which is optional. Ensure that a question mark (?) is included in front of each query parameter that is in the format of *Parameter name=Parameter value*. For example, **?limit=10** indicates that a maximum of 10 data records can be queried.

NOTE

To simplify URI display, each API is provided with only a **resource-path** and a request method. This is because the **URI-scheme** value of all APIs is **HTTPS**, and the endpoints of a service are the same in a region. Therefore, the two parts are omitted.

Request Methods

HTTP-based request methods, which are also called operations or actions, specify the type of operations that you are requesting.

- **GET**: requests the server to return specified resources.
- **PUT**: requests the server to update specified resources.
- **POST**: requests the server to add resources or perform special operations.
- **DELETE**: requests the server to delete specified resources, for example, an object.
- **HEAD**: requests a server resource header.
- **PATCH**: requests the server to update partial content of a specified resource. If the resource is unavailable, the PATCH method is used to create a resource.

For example, in the URI of the API for [creating an IAM User](#), the request method is **POST**. The request is as follows:

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3.0/OS-USER/users
```

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, add **Content-Type** that defines a request body type to request for the authentication information.

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**. For other values, the description will be provided for specific APIs.
- **Authorization**: signature authentication information. This field is optional. When AK/SK authentication is enabled, this field is automatically specified when SDK is used to sign the request. For details, see [AK/SK Authentication](#).
- **X-Sdk-Date**: time when a request is sent. This field is optional. When AK/SK authentication is enabled, this field is automatically specified when SDK is used to sign the request. For details, see [AK/SK Authentication](#).
- **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.
- **X-Project-ID**: subproject ID. This field is optional and can be used in multi-project scenarios. The **X-Project-ID** field is mandatory in the request header for accessing resources in a sub-project through AK/SK authentication.
- **X-Domain-ID**: account ID, which is optional. When you call APIs of global services using AK/SK authentication, **X-Domain-ID** is needed in the request header.

For the API used to [create an IAM user as the administrator](#), if AK/SK authentication is enabled, the request with the header is as follows:

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****
```

Request Body

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

The request body varies according to the APIs. Certain APIs do not require the request body, such as the **GET** and **DELETE** APIs.

For the API for [creating an IAM user](#), you can check the required request parameters and their description in the API request. The following provides an example request with a body included. Replace the italic fields in bold with the actual values.

- **accountid**: account ID of the IAM user
- **username**: IAM username to be created
- **email**: email address of the IAM user
- *********: password of the IAM user

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Sdk-Date: 20240416T095341Z
Authorization: SDK-HMAC-SHA256 Access=*****, SignedHeaders=content-type;host;x-sdk-date,
Signature=*****

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

By now, all data required for an API request is available. You can send the request to call the API through curl, Postman, or coding.

3.2 Authentication

Calling an API can be authenticated using either of the following methods:

- Authentication using AK/SK: Requests are encrypted using access key ID (AK)/secret access key (SK). Authentication using AK/SK is recommended because it provides higher security than authentication using tokens.
- Authentication using tokens: General requests are authenticated using tokens.

Authentication Using AK/SK

NOTE

- AK/SK authentication supports API requests with a body no larger than 12 MB. For API requests with a larger body, use token authentication.
- You can use the AK/SK in a permanent or temporary access key. The **X-Security-Token** field must be configured if the AK/SK in a temporary access key is used, and the field value is **security_token** of the temporary access key.

In authentication using AK/SK, AK/SK is used to sign a request and add the signature in a request as its header for authentication.

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

In authentication using AK/SK, you can use AK/SK to sign requests based on the signature algorithm or use a dedicated signature SDK to sign the requests. For details about how to sign requests and use the signing SDK, see [AK/SK Signing and Authentication Guide](#).

NOTICE

The signature SDK only supports signature, which is different from the SDKs provided by services.

Authentication Using Tokens

NOTE

- The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the API.
- Ensure that the token is valid when you use it. Using a token that will soon expire may cause API calling failures.

A token specifies certain permissions in a computer system. Authentication using a token adds the token in a request as its header during API calling to obtain permissions to operate APIs.

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

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

After obtaining the token, add the **X-Auth-Token** header in a request to specify the token when calling other APIs. For example, if the token is **ABCDEFJ....**, add **X-Auth-Token: ABCDEFJ....** in a request as follows:

```
POST https://iam.eu-west-101.myhuaweicloud.com/v3.0/OS-USER/users
Content-Type: application/json
X-Auth-Token: ABCDEFG....
```

3.3 Returned Values

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

Status Code

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

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

Response Header

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

For the API for [creating an IAM user](#), the message header shown in [Figure 3-1](#) is returned.

Figure 3-1 Header of the response to the request for creating an IAM user

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

Response Body

A response body is generally returned in a structured format, corresponding to the **Content-Type** in the response header, and is used to transfer content other than the response header.

For the API for [creating an IAM user](#), the following message body is returned. The following is part of the response body for the API for obtaining a user token.

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

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

```
{
  "error_msg": "Request body is invalid.",
  "error_code": "IAM.0011"
}
```

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

4 API V2

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.

Calling Method

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

URI

POST /v2/{project_id}/instances

Table 4-1 Path Parameters

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

Request Parameters

Table 4-2 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name. An instance name can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter or digit. 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 dc_demo, the two instances are respectively named dc_demo-000 and dc_demo-001.
engine	Yes	String	Cache engine: Redis.
engine_version	No	String	Cache version. If the cache engine is Redis, this parameter is mandatory. The version can be 4.0/5.0/6.0.
capacity	Yes	Float	Cache capacity (GB). For a single-node or master/standby DCS Redis 4.0/5.0/6.0 instance, the value can be 0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 24, 32, 48, or 64. For a cluster instance, the value can be 4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or **1024. For a read/write splitting DCS Redis 4.0/5.0 instance, the value can be 8, 16, 32, or 64.

Parameter	Mandatory	Type	Description
spec_code	Yes	String	Product flavor. The query method is as follows: • Method 1: Log in to the DCS console, go to the instance creation page, and check the instance flavor. • Method 2: Call the API used to query product flavors.
az_codes	Yes	Array of strings	Code of the AZ where the cache node resides and which has available resources. For details, see Querying AZs . Check whether the desired AZ has available resources. Master/Standby, read/write splitting, 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.
vpc_id	Yes	String	VPC ID. To obtain it, do as follows: • Method 1: Log in to the VPC console and view the VPC ID on the My VPCs page. • Method 2: Call the VPC API. For details, see Querying VPCs.
subnet_id	Yes	String	Network ID of the subnet. To obtain it, do as follows: • Method 1: Log in to VPC console and click the target subnet on the Subnets tab page. You can view the network ID on the displayed page. • Method 2: Call the VPC API. For details, see Querying Subnets.

Parameter	Mandatory	Type	Description
security_group_id	No	String	Security group to which the instance belongs. DCS Redis 4.0 and later instances do not support security groups but whitelists. You can obtain it in either of the following ways: • Method 1: Log in to the VPC console and view the security group ID on the security group details page. • Method 2: Call the API used to query security group details. For details, see .
publicip_id	No	String	ID of the EIP bound to the DCS Redis instance. This parameter is reserved. Retain the default value.
enterprise_project_id	No	String	Enterprise project ID.
enterprise_project_name	No	String	Enterprise project name.
description	No	String	Instance description. The description can contain a maximum of 1024 characters. NOTE The backslash (\) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character (\) before the characters, for example, \\ and \".
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: 1. Value range: 1 to 100

Parameter	Mandatory	Type	Description
maintain_begin	No	String	UTC time when the maintenance time window starts. The format is HH:mm:ss. • The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see Listing Maintenance Time Windows. • For example, the start time must be on the hour, such as 18:00:00 and 19:00:00. • The start time and end time must be set in pairs. If the start time is left blank, the end time must also be left blank. In this case, the system automatically sets the start time to 18:00:00.
maintain_end	No	String	UTC time when the maintenance time window ends. The format is HH:mm:ss. • The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see Listing Maintenance Time Windows. • 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. • 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.

Parameter	Mandatory	Type	Description
password	No	String	Password of a DCS instance. NOTE When no_password_access is set to false or not specified, the request must contain the password parameter. The password of a DCS Redis instance must meet the following complexity requirements: • The password must contain 8 to 64 characters. • Must contain at least three of the following character types: – Lowercase letters – Uppercase letters – Digits – Special characters `~!@#\$^&*()-_+=\ {}<.>/`?
no_password_access	No	Boolean	Whether the instance can be accessed without a password. • true: The instance can be accessed without a password. • false: The instance can be accessed only after password authentication. If this parameter is not set, the default value false is used.
bss_param	No	BssParam object	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.
instance_backup_policy	No	BackupPolicy object	Backup policy. This parameter is supported when the instance type is master/standby or cluster.
tags	No	Array of ResourceTag objects	Instance tag key and value.
access_user	No	String	Leave this parameter empty.

Parameter	Mandatory	Type	Description
enable_publicip	No	Boolean	This parameter is reserved. Retain the default value.
port	No	Integer	Port customization. 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.
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 COMMAND , KEYS , FLUSHDB , FLUSHALL , SCAN , HSCAN , SSCAN , ZSCAN , and HGETALL commands can be renamed.
template_id	No	String	Parameter template ID. The default template is used when no ID is specified. To specify a custom parameter template, obtain the template ID by referring to Viewing Parameter Templates .

Table 4-3 BssParam

Parameter	Mandatory	Type	Description
is_auto_renew	No	String	Whether to automatically renew resources. This parameter is mandatory when the billing mode is yearly/ monthly. Value range: ● false: Do not automatically renew the subscription. ● true: Automatically renew the subscription. The default value is false. Note: If this parameter is set to true, when the subscription expires, the system automatically renews it for one month by default (the length of the renewal is subject to changes). For details, contact customer service.
charging_mode	Yes	String	Billing mode. The default value is postPaid, indicating pay-per-use.

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Indicates whether fees are deducted automatically from the account balance. Non-automatic payment is used by default. Value range: • true: Fees are automatically deducted from the account balance. • false: The order must be paid manually. This is the default value. Note: If this parameter is set to true, fees will be automatically deleted from the account balance. To use cash coupons, set this parameter to false and go to the Billing Center to make the payment. **If this parameter is set to false, the instance enters the Payment in progress state after being created. You must go to Billing Center > Orders to pay for the order. Otherwise, the order is always pending payment and the instance creation is not considered successful.
period_type	No	String	Subscription cycle type. This field is mandatory if the billing mode is yearly/monthly. Options: • month: monthly • year: yearly

Parameter	Mandatory	Type	Description
period_num	No	Integer	Subscription cycles. This parameter is optional for pay-per-use billing. Value range: (subject to change due to operation policy change) • 1–9, if period_type is set to month. • 1–3, if period_type is set to year. Note: This parameter is mandatory if the billing mode is yearly/monthly.

Table 4-4 BackupPolicy

Parameter	Mandatory	Type	Description
backup_type	Yes	String	Backup type. • auto: automatic backup • manual: manual backup
save_days	No	Integer	This parameter is mandatory when backup_type is set to auto. Retention period, in days. The value ranges from 1 to 7.
periodical_backup_plan	No	BackupPlan object	Backup schedule. This parameter is mandatory when backup_type is set to auto.

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 1 to 7 , where 1 indicates Monday, and 7 indicates Sunday.
period_type	Yes	String	Interval at which backup is performed, which supports only weekly currently.
begin_at	Yes	String	Time at which backup starts. 00:00-01:00 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. • Must be specified. • Must be unique for each resource. • Can contain a maximum of 36 characters. • Must be unique and cannot be empty.
value	No	String	Tag value. • This parameter is mandatory when action is set to create and is optional when action is set to delete. • It can contain a maximum of 43 characters.

Response Parameters

Status code: 200

Table 4-7 Response body parameters

Parameter	Type	Description
instances	Array of Instances 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.
error_code	String	Error code.
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null.

Status code: 401**Table 4-10** Response body parameters

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

Status code: 403

Table 4-11 Response body parameters

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

Status code: 404**Table 4-12** Response body parameters

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

Status code: 500**Table 4-13** Response body parameters

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

Example Requests

- Creating a DCS Redis instance

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

```
{
  "name": "dcs-APItest",
  "description": "Test",
  "engine": "Redis",
  "engine_version": "5.0",
  "enterprise_project_id": 0,
  "enterprise_project_name": "default",
```

```
"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

```
{
  "enterprise_project_name" : "default",
  "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,
  "enterprise_project_id" : 0,
  "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. NOTE If the instance status is RUNNING , 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.

Calling Method

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

URI

GET /v2/{project_id}/instances

Table 4-14 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-15 Query Parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	Parameter description: Instance ID, which can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.
include_failure	No	String	Parameter description: Indicates whether to return the number of instances that fail to be created. Constraints: N/A. Value range: • true: yes • false: no Default value: false
include_delete	No	String	Parameter description: Whether to return the number of instances that have been deleted. Constraints: N/A. Value range: • true: yes • false: no Default value: false

Parameter	Mandatory	Type	Description
name	No	String	Parameter description: Instance name. Constraints: N/A. Value range: N/A. Default value: N/A.
offset	No	Integer	Parameter description: Offset where the query starts Constraints: N/A. Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–1000 Default value: 10
status	No	String	Parameter description: Instance status. Constraints: N/A. Value range: For details, see DCS Instance Statuses . Default value: N/A.

Parameter	Mandatory	Type	Description
name_equal	No	String	Parameter description: Exact query by instance name. Constraints: N/A Value range: N/A Default value: N/A
tags	No	String	Parameter description: Query by instance tag key-value pair. <i>{key}</i> indicates the tag key, and <i>{value}</i> indicates the tag value. Constraints: To query instances with multiple tag keys and values, separate key-value pairs with commas (,). Value range: N/A. Default value: N/A.
ip	No	String	Parameter description: IP address of a DCS instance, for example, 192.168.7.146 It can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.

Parameter	Mandatory	Type	Description
capacity	No	String	Parameter description: DCS instance memory, in GB. Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-16 Response body parameters

Parameter	Type	Description
instance_num	Integer	Parameter description: Number of instances. Value range: N/A.
instances	Array of InstanceListInfo objects	Parameter description: Instance details array. Value range: N/A.

Table 4-17 InstanceListInfo

Parameter	Type	Description
publicip_id	String	Parameter description: ID of the EIP bound to a DCS Redis instance. This parameter is reserved. The value is null . Value range: N/A.

Parameter	Type	Description
vpc_name	String	Parameter description: VPC name. Value range: N/A.
charging_mode	Integer	Parameter description: Billing mode. Value range: 0: pay-per-use
vpc_id	String	Parameter description: ID of the VPC where the DCS Redis instance is located. Value range: N/A.
subnet_id	String	Parameter description: ID of the subnet bound to a DCS Redis instance. Value range: N/A.
security_group_id	String	Parameter description: ID of the security group bound to the DCS Redis instance. Value range: N/A.
created_at	String	Parameter description: Instance creation time. For example, 2017-03-31T12:24:46.297Z. Value range: N/A.
updated_at	String	Parameter description: Instance update time. Format: 2017-03-31T19:24:46.297Z. Value range: N/A.
enable_ssl	Boolean	Parameter description: This parameter is reserved. Value range: N/A

Parameter	Type	Description
max_memory	Integer	Parameter description: Total memory of an instance, in MB. Value range: N/A.
used_memory	Integer	Parameter description: Used memory of an instance, in MB. Value range: N/A.
publicip_address	String	Parameter description: EIP bound to the DCS Redis instance. This parameter is reserved. The value is null . Value range: N/A.
capacity	Integer	Parameter description: Cache size of the instance, in GB. Value range: N/A.
capacity_minor	String	Parameter description: Memory of a DCS instance whose size is less than 1 GB, in GB. Value range: N/A.
order_id	String	Parameter description: Order ID. The value is null when a pay-per-use instance is created. Value range: N/A.
maintain_begin	String	Parameter description: UTC time when the maintenance time window starts. The format is <i>HH:mm:ss</i> . Value range: N/A.

Parameter	Type	Description
maintain_end	String	Parameter description: UTC time when the maintenance time window ends. The format is <i>HH:mm:ss</i> . Value range: N/A.
engine	String	Parameter description: Cache engine. Value range: Redis
engine_version	String	Parameter description: Cache version. Value range: The engine version of a DCS Redis instance can be: • 4.0 • 5.0 • 6.0 • 7.0
service_upgrade	Boolean	Parameter description: Whether an upgrade task has been created for an instance. Value range: • true: yes • false: no
no_password_access	String	Parameter description: Indicates whether password-protected access is enabled for the instance. Value range: • true: no • false: yes
service_task_id	String	Parameter description: ID of an upgrade task. • This parameter is valid when service_upgrade is set to true. • This parameter is blank when service_upgrade is set to false. Value range: N/A.

Parameter	Type	Description
ip	String	Parameter description: IP address of 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 . Value range: N/A.
access_user	String	Parameter description: Username for accessing a password-protected DCS instance. Value range: N/A.
instance_id	String	Parameter description: Instance ID. Value range: N/A.
enable_publicip	Boolean	Parameter description: Value range:
port	Integer	Parameter description: Port of a DCS instance. Value range: N/A.
user_id	String	Parameter description: ID of the user to which the instance belongs. Value range: N/A.
user_name	String	Parameter description: Username of the instance. Value range: N/A.
domain_name	String	Parameter description: Domain name of a instance. Value range: N/A.

Parameter	Type	Description
readonly_domain_name	String	Parameter description: Read-only domain name of the instance. This parameter is available only for master/standby instances. Value range: N/A.
name	String	Parameter description: Instance name. Value range: N/A.
spec_code	String	Parameter description: Product flavor code. Value range: N/A.
status	String	Parameter description: Instance status. Value range: For details, see DCS Instance Statuses .
tags	Array of ResourceTags objects	Parameter description: Instance tag key and value. Value range: N/A.
enterprise_project_id	String	Parameter description: Enterprise project ID. Value range: N/A.
description	String	Parameter description: Instance description. Value range: N/A.
cpu_type	String	Parameter description: CPU type of the instance. Value range: • x86_64: x86-based • aarch64: Arm-based

Parameter	Type	Description
az_codes	Array of strings	Parameter description: AZs where there are available resources. Value range: N/A.
features	Features object	Parameter description: Features supported by the instance. Value range: N/A.
sub_status	String	Parameter description: Instance sub-status. Value range: N/A.

Table 4-18 ResourceTags

Parameter	Type	Description
key	String	Parameter description: Tag key. Value range: N/A
value	String	Parameter description: Tag value. Value range: N/A

Table 4-19 Features

Parameter	Type	Description
support_acl	Boolean	Parameter description: Whether ACL is supported. Value range: • true: Yes • false: No

Parameter	Type	Description
support_transparent_client_ip	Boolean	Parameter description: Whether client IP pass-through is enabled. Value range: • true: Yes • false: No
support_ssl	Boolean	Parameter description: Whether SSL is supported. Value range: • true: Yes • false: No
support_audit_log	Boolean	Parameter description: Whether audit logs are supported. Value range: • true: Yes • false: No

Status code: 400**Table 4-20** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-21** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-22** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-23** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-24** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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: 200

All instances are listed successfully.

```
{
  "instance_num" : 1,
  "instances" : [ {
    "publicip_id" : { },
    "vpc_name" : "dcs-beta",
    "charging_mode" : 0,
    "vpc_id" : "5e37b3be-950a-48e1-b498-65b63d336481",
    "subnet_id" : "a4112635-3ec0-471c-95c3-5cf49b9533af",
    "user_name" : "clouduser",
    "created_at" : "2022-08-29T09:00:34.335Z",
    "updated_at" : "2022-08-29T09:00:34.335Z",
    "enable_ssl" : false,
    "max_memory" : 128,
    "publicip_address" : null,
    "capacity" : 0,
    "order_id" : null,
    "maintain_begin" : "18:00:00",
    "engine" : "Redis",
    "maintain_end" : "19:00:00",
    "capacity_minor" : ".125",
    "service_upgrade" : false,
    "no_password_access" : true,
    "service_task_id" : "",
    "ip" : "192.168.0.195",
    "used_memory" : 2,
    "access_user" : null,
    "instance_id" : "c830053e-d5a3-4bc0-b6d6-ca37d1ea9dd5",
    "enable_publicip" : false,
    "port" : 6379,
    "user_id" : "d53977d1adfb49c5b025ba7d33a13fd7",
    "domain_name" : "redis-c830053e-d5a3-4bc0-b6d6-ca37d1ea9dd5.dcs.**cloud.com",
    "name" : "dcs-lpvo0829",
    "spec_code" : "redis.ha.xu1.tiny.r2.128",
    "engine_version" : "5.0",
    "status" : "RUNNING",
    "security_group_id" : "securityGroupId",
    "enterprise_project_id" : 0,
    "tags" : [ {
      "key" : 1,
      "value" : "DCS"
    } ],
    "az_codes" : [ "region01", "region02" ],
    "description" : "Instance description.",
    "cpu_type" : "x86_64",
    "features" : {
      "support_acl" : true,
      "support_transparent_client_ip" : true,
      "support_ssl" : false,
      "support_audit_log" : false
    },
    "sub_status" : "normal"
  } ]
}
```

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.

Calling Method

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

URI

DELETE /v2/{project_id}/instances

Table 4-25 Path Parameters

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

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: • true: all instances that fail to be created are deleted. In this case, the instances parameter in the request can be empty. • false or other values: The DCS instances specified by the instances parameter will be deleted.

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 all_failure parameter in the URI is set to false or another value.

Response Parameters

Status code: 200

Table 4-28 Response body parameters

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

Table 4-29 BatchOpsResult

Parameter	Type	Description
result	String	Instance deletion result. Options: success and failed .

Parameter	Type	Description
instance	String	DCS instance ID.

Status code: 400**Table 4-30** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-31** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.
400	Invalid request.
500	Internal service error.

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.

Calling Method

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

URI

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

Table 4-32 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID, which can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-33 Response body parameters

Parameter	Type	Description
vpc_name	String	Parameter description: VPC name. Value range: N/A.
charging_mode	Integer	Parameter description: Billing mode. Value range: 0: pay-per-use
vpc_id	String	Parameter description: ID of the VPC where the DCS Redis instance is located. Value range: N/A.
user_name	String	Parameter description: Username of the instance. Value range: N/A.
created_at	String	Parameter description: Creation completion time, for example, 2017-03-31T12:24:46.297Z Value range: N/A.
description	String	Parameter description: Instance description. Value range: N/A.
security_group_id	String	Parameter description: ID of the security group bound to the DCS Redis instance. Value range: N/A.
security_group_name	String	Parameter description: Name of the tenant security group. Value range: N/A.

Parameter	Type	Description
max_memory	Integer	Parameter description: Total memory size in MB. Value range: N/A.
used_memory	Integer	Parameter description: Used memory size in MB. Value range: N/A.
capacity	Integer	Parameter description: DCS instance memory, in GB. Value range: N/A.
capacity_minor	String	Parameter description: Memory of a DCS instance whose size is less than 1 GB, in GB. Value range: N/A.
maintain_begin	String	Parameter description: UTC time when the maintenance time window starts. The format is <i>HH:mm:ss</i> . Value range: N/A.
maintain_end	String	Parameter description: UTC time when the maintenance time window ends. The format is <i>HH:mm:ss</i> . Value range: N/A.
engine	String	Parameter description: DCS instance engine. Value range: N/A.
no_password_access	String	Parameter description: Indicates whether password-protected access is enabled for the instance. Value range: • true: no • false: yes

Parameter	Type	Description
ip	String	Parameter description: IP address of 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 . Value range: N/A.
instance_backup_policy	InstanceBackupPolicy object	Parameter description: Backup policy. This parameter is available for master/standby, read/write splitting, and cluster instances. Value range: N/A.
az_codes	Array of strings	Parameter description: AZ where the instance is located. The AZ code is returned. Value range: N/A.
available_zones	Array of strings	Parameter description: ID of the AZ where the instance is in. The AZ ID is returned. Value range: N/A.
access_user	String	Parameter description: Username for accessing a password-protected DCS instance. Value range: N/A.
instance_id	String	Parameter description: Instance ID. Value range: N/A.
port	Integer	Parameter description: Port of a DCS instance. Value range: N/A.

Parameter	Type	Description
user_id	String	Parameter description: ID of the user to which the instance belongs. Value range: N/A.
name	String	Parameter description: Instance name. Value range: N/A.
spec_code	String	Parameter description: Product flavor code. Value range: N/A.
subnet_id	String	Parameter description: ID of the subnet bound to a DCS Redis instance. Value range: N/A.
subnet_name	String	Parameter description: Subnet name. Value range: N/A.
subnet_cidr	String	Parameter description: Subnet CIDR block. Value range: N/A.
engine_version	String	Parameter description: Cache version. Value range: The engine version of a DCS Redis instance can be: • 4.0 • 5.0 • 6.0 • 7.0

Parameter	Type	Description
order_id	String	Parameter description: Order ID. Value range: N/A.
status	String	Parameter description: DCS instance status. Value range: For details, see DCS Instance Statuses .
domain_name	String	Parameter description: Domain name of an instance. Value range: N/A.
readonly_domain_name	String	Parameter description: Read-only domain name of an instance. This parameter is available only for master/standby instances. Value range: N/A.
enable_publicip	Boolean	Parameter description: Value range:
publicip_id	String	Parameter description: ID of the EIP bound to a DCS Redis instance. This parameter is reserved. The value is null . Value range: N/A.
publicip_address	String	Parameter description: EIP bound to the DCS Redis instance. This parameter is reserved. The value is null . Value range: N/A.
enable_ssl	Boolean	Parameter description: This parameter is reserved. Value range: N/A

Parameter	Type	Description
service_upgrade	Boolean	Parameter description: Whether an upgrade task has been created for an instance. Value range: • true: yes • false: no
service_task_id	String	Parameter description: ID of an upgrade task. • This parameter is valid when service_upgrade is set to true. • This parameter is blank when service_upgrade is set to false. Value range: N/A.
enterprise_project_id	String	Parameter description: Enterprise project ID. Value range: N/A.
backend_addrs	String	Parameter description: Backend address of a cluster instance. Value range: N/A.
features	Features object	Parameter description: Features supported by the instance. Value range: N/A.
domain_name_info	DomainNameInfo object	Parameter description: Information about instance domain name update and public domain name resolution. Value range: N/A.
transparent_client_ip_enable	Boolean	Parameter description: Whether client IP pass-through is enabled. Value range: N/A.

Parameter	Type	Description
sub_status	String	Parameter description: Instance sub-status. Value range: N/A.
tags	Array of ResourceTags objects	Parameter description: Instance tag key and value. Value range: N/A.
cpu_type	String	Parameter description: CPU type of the instance. Value range: • x86_64: x86-based • aarch64: Arm-based
enterprise_project_name	String	Parameter description: Enterprise project name. Value range: N/A.
update_at	String	Parameter description: Update time, for example, 2022-07-06T09:32:16.502Z Value range: N/A.
product_type	String	Parameter description: Instance type. Value range: generic : basic edition
storage_type	String	Parameter description: Storage type. Value range: Memory storage.
launched_at	String	Parameter description: Start time, for example, 2022-07-06T09:32:16.502Z Value range: N/A.

Parameter	Type	Description
cache_mode	String	Parameter description: DCS instance type. Value range: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting
support_slow_log_flag	String	Parameter description: Whether slow query logs are supported. Value range: • true: supported • false: not supported
db_number	Integer	Parameter description: Number of databases. Value range: N/A.
replica_count	Integer	Parameter description: Number of replicas. Value range: N/A.
sharding_count	Integer	Parameter description: Number of shards in a cluster instance. Value range: N/A.
bandwidth_info	BandwidthInfo object	Parameter description: Bandwidth information. Value range: N/A.
cloud_service_type_code	String	Parameter description: Cloud service type code. Value range: N/A.

Parameter	Type	Description
cloud_resource_type_code	String	Parameter description: Cloud resource type code. Value range: N/A.
inquiry_spec_code	String	Parameter description: Specification code in the operations system. Value range: N/A.
free	String	Parameter description: This parameter is the same as if_free , is not enabled, and returns null . Value range: N/A
is_free	String	Parameter description: This parameter is reserved and null is returned. Value range: N/A
libos	String	Parameter description: This parameter is reserved and false is returned. Value range: N/A
crr_role	String	Parameter description: This parameter is reserved and null is returned. Value range: N/A
active_active	ActiveActiveInfo object	Parameter description: Instance active-active feature. This parameter is reserved and null is returned. Value range: N/A

Parameter	Type	Description
task	AnyType	Parameter description: Current instance task. Value range: N/A
proxy_links	Array of ProxyLink objects	Parameter description: Instance proxy connections. This parameter is reserved and null is returned. Value range: N/A

Table 4-34 InstanceBackupPolicy

Parameter	Type	Description
backup_policy_id	String	Parameter description: Backup policy ID. Value range: N/A.
created_at	String	Parameter description: Creation time, in the format of 2022-04-11T09:45:24.790Z. Value range: N/A.
updated_at	String	Parameter description: Update time, in the format of 2022-04-12T02:22:03.269Z. Value range: N/A.
policy	BackupPolicyResp object	Parameter description: Backup policy. Value range: N/A.
tenant_id	String	Parameter description: Tenant ID. Value range: N/A.

Table 4-35 BackupPolicyResp

Parameter	Type	Description
backup_type	String	Parameter description: Backup type. Value range: • auto: automatic backup • manual: manual backup
save_days	Integer	Parameter description: Retention period, in days. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: 1-7
periodical_backup_plan	BackupPlan object	Parameter description: Backup plan. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: N/A.

Table 4-36 BackupPlan

Parameter	Type	Description
timezone_offset	String	Parameter description: Time zone of the backup. This parameter is no longer used. Value range: N/A.
backup_at	Array of integers	Parameter description: Day on which the backup starts every week. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: 1-7: Monday to Sunday

Parameter	Type	Description
period_type	String	Parameter description: Interval at which backup is performed, which supports only weekly currently. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: N/A.
begin_at	String	Parameter description: UTC time when the backup starts. For example, 00:00-01:00 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. Value range: N/A.

Table 4-37 Features

Parameter	Type	Description
support_acl	Boolean	Parameter description: Whether ACL is supported. Value range: • true: Yes • false: No
support_transparent_client_ip	Boolean	Parameter description: Whether client IP pass-through is enabled. Value range: • true: Yes • false: No
support_ssl	Boolean	Parameter description: Whether SSL is supported. Value range: • true: Yes • false: No

Parameter	Type	Description
support_audit_log	Boolean	Parameter description: Whether audit logs are supported. Value range: • true: Yes • false: No

Table 4-38 DomainNameInfo

Parameter	Type	Description
support_public_resolve	Boolean	Parameter description: Whether to enable public domain name resolution. Value range: • true: yes • false: no
is_latest_rules	Boolean	Parameter description: Whether the current domain name is the latest. Value range: • true: Yes • false: No
zone_name	String	Parameter description: Region suffix of the domain name. Value range: N/A.
history_domain_names	Array of DomainNameEntity objects	Parameter description: Historical domain name information. Value range: N/A.

Table 4-39 DomainNameEntity

Parameter	Type	Description
domain_name	String	Parameter description: Historical domain names of the instance. Value range: N/A.
is_readonly	Boolean	Parameter description: Whether the domain name is read-only. Value range: • true: Yes • false: No

Table 4-40 ResourceTags

Parameter	Type	Description
key	String	Parameter description: Tag key. Value range: N/A
value	String	Parameter description: Tag value. Value range: N/A

Table 4-41 BandwidthInfo

Parameter	Type	Description
begin_time	Long	Parameter description: Start time of temporary increase. Value range: N/A.
end_time	Long	Parameter description: End time of temporary increase. Value range: N/A.

Parameter	Type	Description
current_time	Long	Parameter description: Current time. Value range: N/A.
bandwidth	Integer	Parameter description: Current bandwidth, in Mbit/s. Value range: N/A
next_expand_time	Long	Parameter description: Next increase time. Value range: N/A.
expand_count	Integer	Parameter description: Number of increases. Value range: N/A.
expand_effect_time	Long	Parameter description: Interval between temporary increases. Value range: N/A.
expand_interval_time	Long	Parameter description: Time to the next increase. Value range: N/A.
max_expand_count	Integer	Parameter description: Maximum number of increases. Value range: N/A.
task_running	Boolean	Parameter description: Whether the task is running. Value range: N/A.
assured_bandwidth	Integer	Parameter description: Assured bandwidth, in Mbit/s. Value range: N/A

Parameter	Type	Description
max_bandwidth_for_node	Integer	Parameter description: Maximum node bandwidth, in Mbit/s. Value range: N/A

Table 4-42 ActiveActiveInfo

Parameter	Type	Description
active_active_status	AnyType	Parameter description: Instance active-active status. Value range: enabled: Can be enabled. disabled: Cannot be enabled. opening: enabled. closing: disabled.
active_cluster_index	AnyType	Parameter description: Instance active-active cluster index. Value range: N/A

Table 4-43 ProxyLink

Parameter	Type	Description
ip	AnyType	Parameter description: Proxy IPv4. Value range: N/A
ipv6_ip	AnyType	Parameter description: Proxy IPv6. Value range: N/A
az_code	AnyType	Parameter description: AZ where the proxy is located. Value range: N/A

Parameter	Type	Description
role	AnyType	Parameter description: Proxy role. Value range: N/A
domain_name	AnyType	Parameter description: Proxy domain name. Value range: N/A

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,
  "enterprise_project_name" : "default",
  "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" : [ "d539378ec1314c85b76fefa3f7071458" ],
  "access_user" : null,
  "enterprise_project_id" : "0",
  "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",
"free" : null,
"is_free" : null,
"libos" : false,
"crr_role" : null,
"active_active" : null,
"task" : "EXTENDING",
"proxy_links" : null
}
```

Status Codes

Status Code	Description
200	The specified instance is queried successfully.
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 the DCS instance.

NOTE

To delete pay-per-use resources, perform operations in this section. To unsubscribe from resources billed in the yearly/monthly mode, see [Unsubscribing from Yearly/Monthly Resources](#).

Calling Method

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

URI

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

Table 4-44 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 204

Instance deleted successfully.

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.

Calling Method

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

URI

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

Table 4-45 Path Parameters

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

Request Parameters

Table 4-46 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Instance name. An instance name can contain letters, digits, underscores (_), and hyphens (-) and must start with a letter. 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 dc_demo, the two instances are respectively named dc_demo-000 and dc_demo-001.
description	No	String	Description of an instance. 0–1,024 characters NOTE The backslash (\) and quotation mark (") are special characters for JSON messages. When using these characters in a parameter value, add the escape character (\) before the characters, for example, \ and \".
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.

Parameter	Mandatory	Type	Description
rename_commands	No	RenameCommandResp object	Command renaming list.
maintain_begin	No	String	UTC time when the maintenance time window starts. The format is HH:mm:ss. • The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see Listing Maintenance Time Windows. • For example, the start time must be 18:00:00, 19:00:00, and so on. • 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.
maintain_end	No	String	UTC time when the maintenance time window ends. The format is HH:mm:ss. • The start time and end time of the maintenance window must be within the time segment of a supported maintenance window. For details, see Listing Maintenance Time Windows. • 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. • 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.
security_group_id	No	String	This parameter is reserved.

Parameter	Mandatory	Type	Description
instance_backup_policy	No	BackupPolicy object	Backup policy. This parameter is supported when the instance type is master/standby or cluster.

Table 4-47 RenameCommandResp

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

Table 4-48 BackupPolicy

Parameter	Mandatory	Type	Description
backup_type	Yes	String	Backup type. • auto: automatic backup • manual: manual backup
save_days	No	Integer	This parameter is mandatory when backup_type is set to manual . 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	BackupPlan object	Backup schedule. This parameter is mandatory when backup_type is set to manual . The automatic backup policy is retained when automatic backup is switched to manual backup.

Table 4-49 BackupPlan

Parameter	Mandatory	Type	Description
timezone_offset	No	String	Parameter description: Time zone of the backup. This parameter is no longer used. Value range: N/A.
backup_at	Yes	Array of integers	Parameter description: Day on which the backup starts every week. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: 1–7: Monday to Sunday
period_type	Yes	String	Parameter description: Interval at which backup is performed, which supports only weekly currently. The automatic backup policy is retained when automatic backup is switched to manual backup. Value range: N/A.
begin_at	Yes	String	Parameter description: UTC time when the backup starts. For example, 00:00–01:00 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. Value range: N/A.

Response Parameters

Status code: 204
DCS instance modified successfully.

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}/instances/{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.

Calling Method

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

URI

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

Table 4-50 Path Parameters

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

Request Parameters

Table 4-51 Request body parameters

Parameter	Mandatory	Type	Description
spec_code	Yes	String	Flavor after the modification. The query method is as follows: • Method 1: Log in to the DCS console, go to the instance creation page, and check the instance flavor. • Method 2: Call the API used to query product flavors.

Parameter	Mandatory	Type	Description
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 0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 32, or 64. For a cluster DCS Redis 4.0 or later instance, the value can be 4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024. For a read/write splitting DCS Redis 4.0 or later instance, the value can be 1, 2, 4, 8, 16, 32, 64. For a single-node or master/standby DCS Memcached instance, the value can be 2, 4, 8, 16, 32, or 64. In addition to integers, 0.125, 0.25, and 0.5 are also supported.
bss_param	No	BssParamEntity 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	Modification type. Mandatory when the number of replicas of a DCS Redis instance is modified. • createReplication: adding replicas • deleteReplication: deleting replicas • addSharding: adding shards • instanceType: changing the instance type. Currently, you can change a master/standby or read/write splitting DCS Redis 4.0/5.0/6.0 instance to the Proxy Cluster type, or from Proxy Cluster to master/standby or read/write splitting[, or from master/standby to read/write splitting].
available_zones	No	Array of strings	Code of the AZ where each replica is in. This parameter is mandatory when you add replicas to a DCS Redis 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. For details, see Querying AZs.
node_list	No	Array of strings	ID of the replica to delete. This parameter is mandatory when you delete replicas of a master/standby or read/write splitting DCS Redis instance. Currently, only one replica can be deleted at a time. For details, see Querying Details of Shards and Replicas.

Parameter	Mandatory	Type	Description
execute_immediately	No	Boolean	Whether to apply the change immediately. The default value is true. • true: Yes. • false: No. Apply the change in the maintenance time window. Specification changes can be applied during the maintenance window only in some scenarios. For details, see Modifying Specifications.
enable_ipv6	No	Boolean	Parameter description: Whether IPv6 is enabled. Constraints: N/A Value range: true: Yes false: No Default value: false

Table 4-52 BssParamEntity

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Indicates whether fees are deducted automatically from the account balance. Non-automatic payment is used by default. Value range: • true: Fees are automatically deducted from the account balance. • false: The order must be paid manually. This is the default value. Note: If this parameter is set to true, fees will be automatically deleted from the account balance. To use cash coupons, set this parameter to false and go to the Billing Center to make the payment. If this parameter is set to false, go to Billing Center > Orders to pay for the order after modifying specifications or creating an instance. Otherwise, the order is always pending payment and the instance modification or creation is not considered successful.

Response Parameters

Status code: 204

DCS instance specifications modified successfully.

None

Example Requests

- Changing to a master/standby instance with 3 replicas and 1 GB

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

```
{
  "spec_code" : "redis.ha.xu1.large.r3.1",
  "new_capacity" : 1,
  "change_type" : "createReplication",
```



```
"available_zones" : [ "e7afd64502d64fe3bfb60c2c82ec0ec6",  
"d90ff6d692954373bf53be49cf3900cb" ],  
"execute_immediately" : true  
}
```

- Changing to a Redis Cluster instance with 2 replicas and 8 GB

```
{  
"spec_code" : "redis.cluster.xu1.large.r2.8",  
"new_capacity" : 8,  
"reserved_ip" : [ "192.168.0.125" ],  
"change_type" : "deleteReplication",  
"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.

Calling Method

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

URI

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

Table 4-53 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.

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

Request Parameters

None

Response Parameters

Status code: 204

Master/standby switchover performed successfully.

Status code: 400

Table 4-54 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-55 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-56** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-57 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-58** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Calling Method

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

URI

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

Table 4-59 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

Table 4-60 Request body parameters

Parameter	Mandatory	Type	Description
old_password	Yes	String	Parameter description: Old instance password. Constraints: The password contains 8 to 64 characters. Value range: Contains at least three types of the following characters: • Lowercase letters • Uppercase letters • Digits • Special characters `~!@#\$^&*()-_+= {<,.>/? Default value: N/A
new_password	Yes	String	Parameter description: New instance password. Constraints: The new password must be different from the old one. It contains 8 to 64 characters. Value range: Contains at least three types of the following characters: • Lowercase letters • Uppercase letters • Digits • Special characters `~!@#\$^&*()-_+= {<,.>/? Default value: N/A

Response Parameters

Status code: 200

Table 4-61 Response body parameters

Parameter	Type	Description
lock_time	String	Parameter description: Lockout duration, in minutes. After 5 consecutive incorrect password attempts, the account will be locked. Passwords cannot be changed or reset during the lockout period. Value range: 0-5
result	String	Parameter description: Password change result. Value range: • success: The password is changed successfully. • passwordFailed: The password verification fails. • locked: The account is locked. • failed: The password fails to be changed.
lock_time_left	String	Parameter description: Lockout remaining time, in minutes. Value range: 0-5
retry_times_left	String	Parameter description: Number of remaining password attempts. Value range: N/A
message	String	Parameter description: Modification result description. Value range: N/A

Status code: 400

Table 4-62 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-63** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Calling Method

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

URI

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

Table 4-64 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

Table 4-65 Request body parameters

Parameter	Mandatory	Type	Description
new_password	No	String	Parameter description: New password. When no_password_access is set to false or not specified, the request must contain the password parameter. Constraints: The password contains 8 to 64 characters. Value range: Contains at least three types of the following characters: • Lowercase letters • Uppercase letters • Digits • Special characters `~!@#\$%^&*()-_+= {>,.<./? Default value: N/A
no_password_access	No	Boolean	Parameter description: Whether to change the DCS instance to password-free. Constraints: N/A Value range: • true: Resetting the DCS instance to be password-free. • false: Resetting the DCS instance to be password-protected. Default value: false

Response Parameters

Status code: 200

Table 4-66 Response body parameters

Parameter	Type	Description
retry_times_left	String	Parameter description: Number of remaining password attempts. Resetting the password does not involve password verification. This parameter is deprecated. The default return is 5. Value range: N/A
lock_time	String	Parameter description: Lockout duration, in minutes. Resetting the password does not involve lockout. This parameter is deprecated. The default return is 0. Value range: N/A
lock_time_left	String	Parameter description: Lockout remaining time, in minutes. Resetting the password does not involve lockout. This parameter is deprecated. The default return is 0. Value range: N/A
code	String	Parameter description: Code of a password resetting result. Value range: 1: The password is reset successfully.
message	String	Parameter description: Password resetting result. Value range: success
ext_message	String	Parameter description: Password resetting error. This parameter is null if the password is reset successfully. Value range: N/A

Status code: 400

Table 4-67 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-68** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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",
  "code": "1",
  "message": "success",
  "ext_message": null
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4839",
  "error_msg": "is not support reset instance password."
}
```

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.

Calling Method

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

URI

GET /v2/{project_id}/instances/status

Table 4-69 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-70 Query Parameters

Parameter	Mandatory	Type	Description
include_failure	No	String	Parameter description: Whether to return the number of instances that fail to be created. Constraints: N/A. Value range: • true: yes • false: no Default value: false

Request Parameters

None

Response Parameters

Status code: 200

Table 4-71 Response body parameters

Parameter	Type	Description
redis	StatusStatistic object	Parameter description: Redis instance quantity statistics. Value range: N/A.
memcached	StatusStatistic object	Parameter description: Memcached instance quantity statistics. Value range: N/A.
paying_count	Integer	Parameter description: Number of instances for which payment is in progress. Value range: N/A.
freezing_count	Integer	Parameter description: Number of instances that are being frozen. Value range: N/A.
migrating_count	Integer	Parameter description: Number of instances on which data migration is in progress. Value range: N/A.
flushing_count	Integer	Parameter description: Number of instances whose data is being cleared. Value range: N/A.
upgrading_count	Integer	Parameter description: Number of instances that are being upgraded. Value range: N/A.

Parameter	Type	Description
restoring_count	Integer	Parameter description: Number of instances for which data restoration is in progress. Value range: N/A.
extending_count	Integer	Parameter description: Number of instances that are being scaled up. Value range: N/A.
creating_count	Integer	Parameter description: Number of instances that are being created. Value range: N/A.
running_count	Integer	Parameter description: Number of running instances. Value range: N/A.
error_count	Integer	Parameter description: Number of abnormal instances. Value range: N/A.
frozen_count	Integer	Parameter description: Number of frozen instances. Value range: N/A.
createfailed_count	Integer	Parameter description: Number of instances that fail to be created. Value range: N/A.
restarting_count	Integer	Parameter description: Number of instances that are being restarted. Value range: N/A.

Table 4-72 StatusStatistic

Parameter	Type	Description
paying_count	Integer	Parameter description: Number of instances for which payment is in progress. Value range: N/A.
freezing_count	Integer	Parameter description: Number of instances that are being frozen. Value range: N/A.
migrating_count	Integer	Parameter description: Number of instances on which data migration is in progress. Value range: N/A.
flushing_count	Integer	Parameter description: Number of instances whose data is being cleared. Value range: N/A.
upgrading_count	Integer	Parameter description: Number of instances that are being upgraded. Value range: N/A.
restoring_count	Integer	Parameter description: Number of instances for which data restoration is in progress. Value range: N/A.
extending_count	Integer	Parameter description: Number of instances that are being scaled up. Value range: N/A.

Parameter	Type	Description
creating_count	Integer	Parameter description: Number of instances that are being created. Value range: N/A.
running_count	Integer	Parameter description: Number of running instances. Value range: N/A.
error_count	Integer	Parameter description: Number of abnormal instances. Value range: N/A.
frozen_count	Integer	Parameter description: Number of instances that have been frozen. Value range: N/A.
createfailed_count	Integer	Parameter description: Number of instances that fail to be created. Value range: N/A.
restarting_count	Integer	Parameter description: Number of instances that are being restarted. Value range: N/A.

Status code: 400

Table 4-73 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-74 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Calling Method

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

URI

PUT /v2/{project_id}/instances/status

Table 4-75 Path Parameters

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

Request Parameters

Table 4-76 Request body parameters

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

Response Parameters

Status code: 200

Table 4-77 Response body parameters

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

Table 4-78 BatchOpsResult

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

Status code: 400**Table 4-79** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-80 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Status Code	Description
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.

Calling Method

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

URI

GET /v2/{project_id}/instances/statistic

Table 4-81 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-82 Response body parameters

Parameter	Type	Description
statistics	Array of InstanceStatistic objects	Parameter description: Statistics of all instances in the Running state. Value range: N/A.

Table 4-83 InstanceStatistic

Parameter	Type	Description
input_kbps	String	Parameter description: Incoming traffic (Kbit/s) of the DCS instance. Value range: N/A.
output_kbps	String	Parameter description: Outgoing traffic (Kbit/s) of the DCS instance. Value range: N/A.
instance_id	String	Parameter description: Instance ID. Value range: N/A.
keys	Long	Parameter description: Number of cached data records. Value range: N/A.
used_memory	Long	Parameter description: Used memory size in MB. Value range: N/A.
max_memory	Long	Parameter description: Total memory size in MB. Value range: N/A.

Parameter	Type	Description
cmd_get_count	Long	Parameter description: Number of times the GET command is run. Value range: N/A.
cmd_set_count	Long	Parameter description: Number of times the SET command is run. Value range: N/A.
used_cpu	String	Parameter description: Accumulated CPU time consumed by the cache in the user state and kernel state, in seconds. Value range: N/A.

Status code: 400**Table 4-84** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-85 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/groups/{group_id}/replications/
{node_id}/slave-priority

Table 4-86 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.
group_id	Yes	String	Shard ID.
node_id	Yes	String	Node ID.

Request Parameters

Table 4-87 Request body parameters

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

Response Parameters

Status code: 204

Replica priority configured successfully.

Status code: 400

Table 4-88 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-89** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-90** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-91** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-92 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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 Removing the IP Address

Function

This API is used to remove the IP address of a read replica from the domain name. After the removal, the read-only domain name will not be resolved to the IP address.

Calling Method

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

URI

DELETE /v2/{project_id}/instances/{instance_id}/groups/{group_id}/replications/{node_id}/remove-ip

Table 4-93 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.
group_id	Yes	String	Shard ID.
node_id	Yes	String	Node ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-94 Response body parameters

Parameter	Type	Description
job_id	String	ID of the IP address removing task.

Status code: 400

Table 4-95 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-96** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403

Table 4-97 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-98** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-99 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
POST https://{dcs_endpoint}/v2/{project_id}/instance/{instance_id}/groups/{group_id}/replications/{node_id}/remove-ip
```

Example Responses

None

Status Codes

Status Code	Description
200	IP address removed 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](#).

4.3.3 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).

Calling Method

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

URI

GET /v2/{project_id}/instance/{instance_id}/groups

Table 4-100 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.
instance_id	Yes	String	Parameter description: Instance ID, which can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-101 Response body parameters

Parameter	Type	Description
group_list	Array of InstanceGroupListInfo objects	Parameter description: Instance shard list. Value range: N/A.
group_count	Integer	Parameter description: Total number of shards in the instance. Value range: N/A.

Table 4-102 InstanceGroupListInfo

Parameter	Type	Description
group_id	String	Parameter description: Instance shard ID. Value range: N/A.
group_name	String	Parameter description: Instance shard name. Value range: N/A.
replication_list	Array of InstanceReplicationListInfo objects	Parameter description: List of replicas in the shard. Value range: N/A.

Table 4-103 InstanceReplicationListInfo

Parameter	Type	Description
replication_role	String	Parameter description: Replica role. Value range: • master: master node • slave: standby node.

Parameter	Type	Description
replication_ip	String	Parameter description: Replica IP address. Value range: N/A.
is_replication	Boolean	Parameter description: Whether the replica is newly added. Value range: • true • false
replication_id	String	Parameter description: Replica ID. Value range: N/A.
node_id	String	Parameter description: Node ID. Value range: N/A.
status	String	Parameter description: Replica status. Value range: N/A.
az_code	String	Parameter description: AZ where the replica is in. Value range: N/A.

Parameter	Type	Description
dimensions	Array of InstanceReplicationDimensionsInfo objects	Parameter description: Monitoring metric dimension of the replica used to call the Cloud Eye API for querying monitoring metrics. • 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. • The first dimension is the primary dimension of the replica. The dimension name is dc_instance_id, and the dimension value corresponds to the ID of the instance to which the replica belongs. • The name of the second dimension is dc_cluster_redis_node, and the dimension value is the ID of the monitored object of the replica, which is different from the replica ID or node ID. Value range: N/A.

Table 4-104 InstanceReplicationDimensionsInfo

Parameter	Type	Description
name	String	Parameter description: Monitoring dimension name. Value range: • dc_instance_id: instance dimension • dc_cluster_redis_node: data node dimension
value	String	Parameter description: Dimension value. Value range: N/A.

Status code: 500**Table 4-105** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 400**Table 4-106** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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": "8abfa7aa73291f15017329e1cddb002f",
      "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](#).

4.3.4 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.

Calling Method

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

URI

GET /v2/{project_id}/instances-logical-nodes

Table 4-107 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-108 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset where the query starts. Constraints: N/A. Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–100 Default value: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 4-109 Response body parameters

Parameter	Type	Description
count	Integer	Parameter description: Total number of instances in the query result. Value range: N/A.
instances	Array of InstanceNodesInfoResp objects	Parameter description: Instance list. Value range: N/A.

Table 4-110 InstanceNodesInfoResp

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A.
node_count	Integer	Parameter description: Total number of nodes of the current instance. Value range: N/A.
nodes	Array of NodesInfoResp objects	Parameter description: Node details. Value range: N/A.

Table 4-111 NodesInfoResp

Parameter	Type	Description
logical_node_id	String	Parameter description: Logical node ID. Value range: N/A.
name	String	Parameter description: Node name. Value range: N/A.
status	String	Parameter description: Node status. Value range: • Creating • Active: Running • Inactive: Faulty • Deleting • AddSharding: A shard is being added.

Parameter	Type	Description
az_code	String	Parameter description: AZ code. Value range: N/A.
node_role	String	Parameter description: Node role. Value range: • redis-server: Redis server node • redis-proxy: proxy node
node_type	String	Parameter description: Node master/standby role. Value range: • master: master node • slave: standby node • proxy: node of a Proxy Cluster instance
node_ip	String	Parameter description: Node IP. Value range: N/A.
node_port	String	Parameter description: Node port. Value range: N/A.
node_id	String	Parameter description: Node ID. Value range: N/A.
priority_weight	Integer	Parameter description: Replica promotion priority. Value range: Priority ranges from 0 to 100 in descending order. 0 indicates that the replica will never be automatically promoted, 1 indicates the highest priority, and 100 indicates the lowest priority.

Parameter	Type	Description
is_access	Boolean	Parameter description: Whether the IP address of the node can be directly accessed. Value range: • true • false
group_id	String	Parameter description: Instance shard ID. Value range: N/A.
group_name	String	Parameter description: Instance shard name. Value range: N/A.
is_remove_ip	Boolean	Parameter description: Whether the IP address is removed from the read-only domain name. Value range: • true • false
replication_id	String	Parameter description: Instance replica ID. Value range: N/A.

Parameter	Type	Description
dimensions	Array of InstanceReplicationDimensionsInfo objects	Parameter description: Monitoring metric dimension of the replica used to call the Cloud Eye API for querying monitoring metrics. • 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. • The first dimension is the primary dimension of the replica. The dimension name is dc_instance_id, and the dimension value is the ID of the instance where the replica is located. • The name of the second dimension is dc_cluster_redis_node, and the dimension value is the ID of the monitored object of the replica, which is different from the replica ID or node ID. Value range: N/A.

Table 4-112 InstanceReplicationDimensionsInfo

Parameter	Type	Description
name	String	Parameter description: Monitoring dimension name. Value range: • dc_instance_id: instance dimension • dc_cluster_redis_node: data node dimension
value	String	Parameter description: Dimension value. Value range: N/A.

Status code: 500**Table 4-113** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 400**Table 4-114** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

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

Error Codes

See [Error Codes](#).

4.3.5 Querying Instance Nodes

Function

This API is used to query nodes of a specified instance.

Available for Redis 4.0 and later instances.

No node information will be returned when the instance is being created.

Constraints

Available for Redis 4.0 and later instances.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/logical-nodes

Table 4-115 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-116 Response body parameters

Parameter	Type	Description
instance_id	String	Instance ID.
total	Integer	Node quantity.
nodes	Array of NodesInfoResp objects	Node information.

Table 4-117 NodesInfoResp

Parameter	Type	Description
logical_node_id	String	Parameter description: Logical node ID. Value range: N/A.
name	String	Parameter description: Node name. Value range: N/A.
status	String	Parameter description: Node status. Value range: • Creating • Active: Running • Inactive: Faulty • Deleting • AddSharding: A shard is being added.
az_code	String	Parameter description: AZ code. Value range: N/A.
node_role	String	Parameter description: Node role. Value range: • redis-server: Redis server node • redis-proxy: proxy node

Parameter	Type	Description
node_type	String	Parameter description: Node master/standby role. Value range: • master: master node • slave: standby node • proxy: node of a Proxy Cluster instance
node_ip	String	Parameter description: Node IP. Value range: N/A.
node_port	String	Parameter description: Node port. Value range: N/A.
node_id	String	Parameter description: Node ID. Value range: N/A.
priority_weight	Integer	Parameter description: Replica promotion priority. Value range: Priority ranges from 0 to 100 in descending order. 0 indicates that the replica will never be automatically promoted, 1 indicates the highest priority, and 100 indicates the lowest priority.
is_access	Boolean	Parameter description: Whether the IP address of the node can be directly accessed. Value range: • true • false
group_id	String	Parameter description: Instance shard ID. Value range: N/A.

Parameter	Type	Description
group_name	String	Parameter description: Instance shard name. Value range: N/A.
is_remove_ip	Boolean	Parameter description: Whether the IP address is removed from the read-only domain name. Value range: • true • false
replication_id	String	Parameter description: Instance replica ID. Value range: N/A.
dimensions	Array of InstanceReplicationDimensionsInfo objects	Parameter description: Monitoring metric dimension of the replica used to call the Cloud Eye API for querying monitoring metrics. • 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. • The first dimension is the primary dimension of the replica. The dimension name is dc_instance_id, and the dimension value is the ID of the instance where the replica is located. • The name of the second dimension is dc_cluster_redis_node, and the dimension value is the ID of the monitored object of the replica, which is different from the replica ID or node ID. Value range: N/A.

Table 4-118 InstanceReplicationDimensionsInfo

Parameter	Type	Description
name	String	Parameter description: Monitoring dimension name. Value range: • dc_instance_id: instance dimension • dc_cluster_redis_node: data node dimension
value	String	Parameter description: Dimension value. Value range: N/A.

Status code: 500**Table 4-119** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 400

Table 4-120 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/logical-nodes?status={status}
```

Example Responses

Status code: 200
Node information queried successfully.

```
{
  "instance_id" : "11368fbb-de1e-4613-9080-1c374b71a1af",
  "total" : 1,
  "nodes" : [ {
    "logical_node_id" : "79653bcbd0e5c104fefedd188aa372d6",
    "name" : "(master)192.168.68.157",
    "status" : "Active",
    "az_code" : "region01",
    "node_role" : "redis-server",
    "node_type" : "master",
    "node_ip" : "192.168.68.157",
    "node_id" : "ff80808189bf92a50189d330303b77aa",
    "is_access" : true,
    "group_id" : "6e0f6e95-57cd-4baf-86d6-bea8815b25a8",
    "group_name" : "group-0",
    "priority_weight" : 100,
    "is_remove_ip" : false,
    "dimensions" : [ {
      "name" : "dcs_instance_id",
      "value" : "11368fbb-de1e-4613-9080-1c374b71a1af"
    }, {
      "name" : "dcs_cluster_redis_node",
      "value" : "79653bcbd0e5c104fefedd188aa372d6"
    } ],
    "replication_id" : null
  } ]
}
```

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.

Calling Method

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

URI

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

Table 4-121 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-122 Response body parameters

Parameter	Type	Description
config_time	String	Parameter description: Time when the instance was operated on. For example, 2017-03-31T12:24:46.297Z. Value range: N/A.

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A.
redis_config	Array of QueryRedisConfig objects	Parameter description: Array of configuration items of the instance. Value range: N/A.
config_status	String	Parameter description: Instance status that is being modified or has been modified. Value range: • UPDATING: The modification is in progress. • FAILURE: The modification failed. • SUCCESS: The modification succeeded.

Parameter	Type	Description
status	String	Parameter description: Instance status. Value range: • PAYING: The order has not been paid or is being processed. • CREATING: The DCS instance is being created. • RUNNING: The DCS instance is running. • CLOSING: The DCS instance is stopping. • STARTING: The DCS instance is starting. • RESTARTING: The DCS instance is restarting. • CLOSED: The DCS instance has stopped. • DELETING: The DCS instance is being deleted. • DELETED: The DCS instance has been deleted. • ERROR: The DCS instance is not running properly. • FAILURE: The DCS instance fails to be configured. • SUCCESS: The DCS instance is successfully configured. • CREATEFAILED: The DCS instance fails to be created. • DELETEFAILED: The DCS instance fails to be deleted. • FREEZING: The instance is frozen. • EXTENDING: The DCS instance's capacity is being increased. • EXTENDEDFAILED: The instance's capacity fails to be increased. • MIGRATING: The DCS instance is migrating data. • OTHER: other status. • FLUSHING: The instance data is being cleared. • RESTORING: The backup data is being restored.

Parameter	Type	Description
		• UPGRADING: The instance software is being upgraded. • IPEXCHANGING: IP switch is in progress. • IROLLBACKING: IP addresses are being rolled back. • MS_SWAPPING: The master/standby switchover is in progress. • AZMigrating: The AZ is being migrated.

Table 4-123 QueryRedisConfig

Parameter	Type	Description
param_value	String	Parameter description: Configuration parameter value. Value range: N/A.
value_type	String	Parameter description: Type of the configuration parameter value. For example, Integer and String. Value range: N/A.
value_range	String	Parameter description: Range of the configuration parameter value. Value range: N/A.
description	String	Parameter description: Description of the configuration item. Value range: N/A.
default_value	String	Parameter description: Default value of the configuration parameter. Value range: N/A.

Parameter	Type	Description
param_name	String	Parameter description: Configuration parameter name. Value range: N/A.
param_id	String	Parameter description: Configuration parameter ID. Value range: N/A.

Status code: 400**Table 4-124** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-125 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Status Code	Description
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.

Calling Method

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

URI

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

Table 4-126 Path Parameters

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

Request Parameters

Table 4-127 Request body parameters

Parameter	Mandatory	Type	Description
redis_config	No	Array of RedisConfig objects	Array of configuration items of the DCS instance.

Table 4-128 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: 204

DCS instance configurations modified successfully.

Status code: 400

Table 4-129 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-130 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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](#).

4.4.3 Querying the List of Instance Parameter Modification Records

Function

This API is used to query the parameter modification record list of an instance by keyword.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/config-histories

Table 4-131 Path Parameters

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

Table 4-132 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 records displayed on each page. The minimum value is 1 . The maximum value is 1000* . If this parameter is not specified, 10 records are displayed on each page by default.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-133 Response body parameters

Parameter	Type	Description
history_num	Integer	Number of instance parameter modification records.
histories	Array of HistoryInfo objects	Details of instance parameter modification records.

Table 4-134 HistoryInfo

Parameter	Type	Description
history_id	String	Modification record ID.
type	String	Modification type.
created_at	String	Modification time.
status	String	Modification status.

Status code: 400

Table 4-135 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-136** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/config-histories?offset=0&limit=10
```

Example Responses**Status code: 200**

List of instance parameter modification records queried successfully.

```
{
  "history_num" : 1,
  "histories" : [ {
    "history_id" : "4ae8507f-7992-40e2-9928-41ccf1db4bdc",
    "type" : "config_param",
    "created_at" : "2022-10-20T03:37:44.636Z",
    "status" : "SUCCESS"
  }
]
```



```
    }  
  }  
}
```

Status Codes

Status Code	Description
200	List of instance parameter modification records queried 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.

Calling Method

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

URI

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

Table 4-137 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 Obtaining a Project ID .

Request Parameters

None

Response Parameters

Status code: 204

Backup file deleted successfully.

Status code: 400

Table 4-138 Response body parameters

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

Status code: 500

Table 4-139 Response body parameters

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

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.

Calling Method

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

URI

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

Table 4-140 Path Parameters

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

Request Parameters

Table 4-141 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 4-142 Response body parameters

Parameter	Type	Description
restore_id	String	ID of the restoration record.

Status code: 400**Table 4-143** Response body parameters

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

Status code: 500**Table 4-144** Response body parameters

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

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

Successful

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

Status Codes

Status Code	Description
200	Successful
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.

Calling Method

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

URI

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

Table 4-145 Path Parameters

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

Table 4-146 Query Parameters

Parameter	Mandatory	Type	Description
begin_time	No	String	Start time of the period to be queried. Format: yyyyMMddHHmmss, for example, 20170718235959.

Parameter	Mandatory	Type	Description
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 4-147 Response body parameters

Parameter	Type	Description
restore_record_response	Array of InstanceRestoreInfo objects	Array of the restoration records.
total_num	Integer	Total number.

Table 4-148 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.

Parameter	Type	Description
error_code	String	Error code displayed for a restoration failure. • dc.s.08.0001 - Failed to start the backup and restoration tool. • dc.s.08.0002 - Execution timed out. • dc.s.08.0003 - Failed to delete the bucket. • dc.s.08.0004 - Failed to obtain the AK/SK. • dc.s.08.0005 - Failed to create a bucket. • dc.s.08.0006 - Failed to query the backup data size. • dc.s.08.0007 - Failed to synchronize data during restoration. • dc.s.08.0008 - The scheduled backup task is not running. The instance is running other tasks.
restore_name	String	Name of a restoration record.
backup_remark	String	Description of the backup.
status	String	Restoration status. • waiting: The task is waiting to begin. • restoring: The restoration is in progress. • succeed: The restoration is successful. • failed: The restoration failed.

Status code: 204

No instance restoration record found.

Status code: 400**Table 4-149** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

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.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/backups/{backup_id}/links

Table 4-150 Path Parameters

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

Request Parameters

Table 4-151 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 4-152 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 LinksItem objects	Collection of URLs for downloading backup files. A maximum of 64 links are allowed.

Table 4-153 LinksItem

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

Status code: 400**Table 4-154** Response body parameters

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

Status code: 500**Table 4-155** Response body parameters

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

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=s3l%2BrLbo%2BFZw%2BUsjVere%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.

Calling Method

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

URI

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

Table 4-156 Path Parameters

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

Request Parameters

Table 4-157 Request body parameters

Parameter	Mandatory	Type	Description
remark	No	String	Description of DCS instance backup.
backup_format	No	String	Format of a DCS instance backup. Values: • aof • rdb

Response Parameters

Status code: 200

Table 4-158 Response body parameters

Parameter	Type	Description
backup_id	String	Backup ID.

Status code: 400

Table 4-159 Response body parameters

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

Status code: 500

Table 4-160 Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

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.

Calling Method

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

URI

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

Table 4-161 Path Parameters

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

Table 4-162 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 4-163 Response body parameters

Parameter	Type	Description
total_num	Integer	Number of returned records.
backup_record_response	Array of BackupRecordResponse objects	Array of the backup details.

Table 4-164 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. • manual: manual backup • auto: automatic backup
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. • <i>dcs.08.0001</i> - Failed to start the backup and restoration tool. • <i>dcs.08.0002</i> - Execution timed out. • <i>dcs.08.0003</i> - Failed to delete the bucket. • <i>dcs.08.0004</i> - Failed to obtain the AK/SK. • <i>dcs.08.0005</i> - Failed to create the bucket. • <i>dcs.08.0006</i> - Failed to query the backup data size. • <i>dcs.08.0007</i> - Failed to synchronize data during restoration. • <i>dcs.08.0008</i> - The scheduled backup task is not running. The instance is running other tasks.
remark	String	Description of DCS instance backup.

Parameter	Type	Description
status	String	Backup status. The options are as follows: • waiting: The task is waiting to begin. • backuping: DCS instance backup is in progress. • succeed: DCS instance backup succeeded. • failed: DCS instance backup failed. • expired: The backup file has expired. • deleted: The backup file has been deleted manually.
is_support_restore	String	Whether restoration is supported. Options: TRUE and FALSE .
execution_at	String	Execution time.
backup_format	String	Backup format.

Status code: 204

No DCS instance backup record is found.

Status code: 400**Table 4-165** Response body parameters

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

Status code: 500**Table 4-166** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.

Parameter	Type	Description
error_code	String	Error code.
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

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.
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.

Calling Method

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

URI

POST /v2/{project_id}/migration-task

Table 4-167 Path Parameters

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

Request Parameters

Table 4-168 Request body parameters

Parameter	Mandatory	Type	Description
task_name	Yes	String	Backup import task name.
description	No	String	Backup import task description.
migration_type	Yes	String	Migration mode. Options: • backupfile_import: importing backup files • online_migration: migrating data online This API can no longer be used to create an online migration task. Please call CreateOnlineMigration-Task instead.

Parameter	Mandatory	Type	Description
migration_method	Yes	String	Type of the migration, which can be full migration or incremental migration. Values: • full_amount_migration: full migration • incremental_migration: incremental migration
backup_files	No	BackupFilesBody object	Backup files to be imported when the migration mode is backup file import.
network_type	No	String	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 CreateOnlineMigration-Task instead.
source_instance	No	SourceInstanceBody 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 CreateOnlineMigration-Task instead.
target_instance	Yes	TargetInstanceBody object	Target Redis information.

Table 4-169 BackupFilesBody

Parameter	Mandatory	Type	Description
file_source	Yes	String	Data source, which can be an OBS bucket or a backup record.
bucket_name	No	String	OBS bucket name. Mandatory when the data source is an OBS bucket.

Parameter	Mandatory	Type	Description
files	Yes	Array of Files 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 4-170 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 4-171 SourceInstanceBody

Parameter	Mandatory	Type	Description
addr	Yes	String	Source Redis address (specified in the source_instance 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 4-172 TargetInstanceBody

Parameter	Mandatory	Type	Description
id	Yes	String	Redis instance ID (mandatory in the target_instance parameter).
name	No	String	Redis instance name (specified in the target_instance 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.
db	No	String	Redis database.

Response Parameters

Status code: 200

Table 4-173 Response body parameters

Parameter	Type	Description
id	String	Migration task ID.
name	String	Migration task name.
status	String	Migration status. Options: SUCCESS , FAILED , MIGRATING , TERMINATED .
error	String	Error message.

Status code: 400

Table 4-174 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-175** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403

Table 4-176 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-177** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-178 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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.

Calling Method

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

URI

GET /v2/{project_id}/migration-tasks

Table 4-179 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-180 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A. Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–1,000 Default value: 10

Parameter	Mandatory	Type	Description
name	No	String	Parameter description: Name of the migration task. Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-181 Response body parameters

Parameter	Type	Description
count	Integer	Parameter description: Number of migration tasks. Value range: N/A.
migration_tasks	Array of MigrationTaskList objects	Parameter description: Migration task list. Value range: N/A.

Table 4-182 MigrationTaskList

Parameter	Type	Description
task_id	String	Parameter description: Migration task ID. Value range: N/A.

Parameter	Type	Description
task_name	String	Parameter description: Migration task name. Value range: N/A.
status	String	Parameter description: Migration status. Value range: • SUCCESS: The task succeeded. • FAILED: The task failed. • MIGRATING: Migration is in progress. • TERMINATED: The task has stopped.
migration_type	String	Parameter description: Migration mode. Value range: • backupfile_import: backup file import • online_migration: online migration
migration_method	String	Parameter description: Type of the migration. Value range: • full_amount_migration: full migration • incremental_migration: incremental migration
ecs_tenant_private_ip	String	Parameter description: 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. Value range: N/A.
data_source	String	Parameter description: Source Redis address, which is ip:port or a bucket name. Value range: N/A.

Parameter	Type	Description
source_instance_name	String	Parameter description: Name of the source instance. If the source Redis is self-hosted, this parameter is left blank. Value range: N/A.
source_instance_id	String	Parameter description: ID of the source instance. If the source Redis is self-hosted, this parameter is left blank. Value range: N/A.
target_instance_address	String	Parameter description: Target Redis address. The format is ip:port . Value range: N/A.
target_instance_name	String	Parameter description: Target instance name. Value range: N/A.
target_instance_id	String	Parameter description: Target instance ID. Value range: N/A.
created_at	String	Parameter description: Time when the migration task is created. Value range: N/A.
description	String	Parameter description: Description of the migration task. Value range: N/A.

Parameter	Type	Description
source_instance_status	String	Parameter description: Status of the source instance. If the source Redis is self-hosted, this parameter is left blank. Value range: N/A.
target_instance_status	String	Parameter description: Status of the target instance. Value range: N/A.
source_instance_subnet_id	String	Parameter description: ID of the source instance subnet. If the source Redis is self-hosted, this parameter is left blank. Value range: N/A.
target_instance_subnet_id	String	Parameter description: ID of the target instance subnet. Value range: N/A.
source_instance_spec_code	String	Parameter description: Specification code of the source instance. If the source Redis is self-hosted, this parameter is left blank. Value range: N/A.
target_instance_spec_code	String	Parameter description: Specification code of the target instance. Value range: N/A.
error_message	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
released_at	String	Parameter description: Time when the migration ECS is released. Value range: N/A.
version	String	Parameter description: Migration task version. Value range: N/A.
resume_mode	String	Parameter description: Operation mode of the migration task. Value range: • auto: automatically reconnect • manual: manually reconnect
supported_features	Array of strings	Parameter description: Supported features. Value range: N/A.

Status code: 400**Table 4-183** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-184** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-185** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-186** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-187 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/666486c2d9b948c1bbea57e714d744fa/migration-tasks?offset=0&limit=10&name=dcs-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.

Calling Method

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

URI

DELETE /v2/{project_id}/migration-tasks/delete

Table 4-188 Path Parameters

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

Request Parameters

Table 4-189 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 4-190 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 4-191 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-192 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-193** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-194 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-195** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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 200 .)
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.

Calling Method

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

URI

GET /v2/{project_id}/migration-task/{task_id}

Table 4-196 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-197 Response body parameters

Parameter	Type	Description
task_id	String	Migration task ID.
task_name	String	Migration task name.
description	String	Migration task description.
status	String	Migration task status. The value can be SUCCESS , FAILED , MIGRATING , TERMINATED , TERMINATING , INCRMIGRATING , FULLMIGRATING , RUNNING (pending configuration), MIGRATION_FAILED , or RELEASED .
migration_type	String	Migration mode, which can be backup file import or online migration.
migration_method	String	Type of the migration, which can be full migration or incremental migration.
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	BackupFilesBody 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.

Parameter	Type	Description
source_instance	SourceInstanceBody object	Source Redis information. This parameter is mandatory for online migration.
target_instance	TargetInstanceBody 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 auto or manual .
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. EXCHANGING is returned only when IP addresses are being switched.

Table 4-198 BackupFilesBody

Parameter	Type	Description
file_source	String	Data source, which can be an OBS bucket or a backup record.
bucket_name	String	OBS bucket name. Mandatory when the data source is an OBS bucket.
files	Array of Files objects	List of backup files to be imported. This parameter is mandatory when the data source is an OBS bucket.

Parameter	Type	Description
backup_id	String	Backup record ID. This parameter is mandatory when the data source is a backup record.

Table 4-199 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 4-200 SourceInstanceBody

Parameter	Type	Description
addr	String	Source Redis address (specified in the source_instance 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 4-201 TargetInstanceBody

Parameter	Type	Description
id	String	Redis instance ID (mandatory in the target_instance parameter).

Parameter	Type	Description
name	String	Redis instance name (specified in the target_instance 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.
addrs	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 4-202** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-203 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-204** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-205 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-206** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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 Configuring Auto-Reconnect for Migration Tasks

Function

This API is used to configure auto-reconnect for migration tasks.

Calling Method

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

URI

PUT /v2/{project_id}/migration-task/{task_id}

Table 4-207 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
task_id	Yes	String	ID of the data migration task.

Request Parameters

Table 4-208 Request body parameters

Parameter	Mandatory	Type	Description
resume_mode	No	String	Reconnection mode of the migration tasks. • auto: automatically reconnect 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. • manual: manually reconnect

Response Parameters

Status code: 200

Details of the background task queried successfully.

Status code: 400

Table 4-209 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-210** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-211** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-212** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-213 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/migration-task/{task_id}
{
  "resume_mode" : "auto"
}
```

Example Responses

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.

Status Code	Description
404	The requested resource could not be found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.6.6 Stopping a Data Migration Task

Function

This API is used to stop a data migration task.

Calling Method

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

URI

POST /v2/{project_id}/migration-task/{task_id}/stop

Table 4-214 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-215 Response body parameters

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

Parameter	Type	Description
description	String	Migration task description.
status	String	Migration task status. The value can be SUCCESS , FAILED , MIGRATING , TERMINATED , TERMINATING , INCRMIGRATING , FULLMIGRATING , RUNNING (pending configuration), MIGRATION_FAILED , or RELEASED .
migration_type	String	Migration mode, which can be backup file import or online migration.
migration_method	String	Type of the migration, which can be full migration or incremental migration.
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	BackupFilesBody 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.
source_instance	SourceInstanceBody object	Source Redis information. This parameter is mandatory for online migration.
target_instance	TargetInstanceBody 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 auto or manual .
supported_features	Array of strings	Supported features.
tenant_vpc_id	String	VPC ID.
tenant_subnet_id	String	Subnet ID.

Parameter	Type	Description
tenant_security_group_id	String	Security group ID.
bandwidth_limit_mb	String	Maximum bandwidth.
task_status	String	Task status. EXCHANGING is returned only when IP addresses are being switched.

Table 4-216 BackupFilesBody

Parameter	Type	Description
file_source	String	Data source, which can be an OBS bucket or a backup record.
bucket_name	String	OBS bucket name. Mandatory when the data source is an OBS bucket.
files	Array of Files 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 4-217 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 4-218 SourceInstanceBody

Parameter	Type	Description
addr	String	Source Redis address (specified in the source_instance parameter).

Parameter	Type	Description
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 4-219 TargetInstanceBody

Parameter	Type	Description
id	String	Redis instance ID (mandatory in the target_instance parameter).
name	String	Redis instance name (specified in the target_instance 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.
addrs	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 4-220 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-221** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403

Table 4-222 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-223** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-224 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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](#).

4.6.7 Querying the Progress of an Online Migration Task

Function

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

Calling Method

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

URI

GET /v2/{project_id}/migration-task/{task_id}/stats

Table 4-225 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-226 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.
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 4-227 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-228** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403

Table 4-229 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-230** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-231 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

https://{dcs_endpoint}/v2/666486c2d9b948c1bbea57e714d744fa/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](#).

4.6.8 Creating an Online Data Migration Task

Function

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

Calling Method

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

URI

POST /v2/{project_id}/migration/instance

Table 4-232 Path Parameters

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

Request Parameters

Table 4-233 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Name of the online migration task.

Parameter	Mandatory	Type	Description
description	No	String	Description of the online migration task.
vpc_id	Yes	String	VPC ID. To obtain it, do as follows: • Method 1: Log in to the VPC console and view the VPC ID in the VPC details. • Method 2: Call the VPC API. For details, see Querying VPCs.
subnet_id	Yes	String	Network ID of the subnet. To obtain it, do as follows: • Method 1: Log in to VPC console and click the target subnet on the Subnets tab page. You can view the network ID on the displayed page. • Method 2: Call the VPC API. For details, see Querying Subnets.
security_group_id	Yes	String	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. To obtain it, do as follows: • Method 1: Log in to the VPC console and choose Access Control > Security Groups. You can create and configure a security group, and obtain the security group ID. • Method 2: Call the API used to query security group details. For details, see Querying Security Group Details.

Response Parameters

Status code: 200

Table 4-234 Response body parameters

Parameter	Type	Description
instance_id	String	Online migration task ID.

Status code: 400

Table 4-235 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-236 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-237** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-238 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-239** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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](#).

4.6.9 Configuring an Online Data Migration Task

Function

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

Calling Method

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

URI

POST /v2/{project_id}/migration/{task_id}/task

Table 4-240 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
task_id	Yes	String	Online migration task ID.

Request Parameters

Table 4-241 Request body parameters

Parameter	Mandatory	Type	Description
migration_method	Yes	String	Type of the migration. • Full migration is suitable for scenarios where services can be interrupted. Data is migrated at one time. • Incremental migration is suitable for scenarios requiring minimal service downtime. • full_amount_migration: full migration • incremental_migration: incremental migration Source instance data updated during the migration will not be migrated to the target instance. 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:

Parameter	Mandatory	Type	Description
resume_mode	Yes	String	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: • auto: automatically reconnect. • manual: manually reconnect.
bandwidth_limit_mb	No	String	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).
source_instance	Yes	ConfigMigrationInstanceBody object	Source Redis information.
target_instance	Yes	ConfigMigrationInstanceBody object	Target Redis information.

Table 4-242 ConfigMigrationInstanceBody

Parameter	Mandatory	Type	Description
id	No	String	Redis instance ID (mandatory if the source Redis address is not specified).

Parameter	Mandatory	Type	Description
addrs	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 4-243 Response body parameters

Parameter	Type	Description
id	String	Migration task ID.
name	String	Migration task name.
status	String	Migration status. Options: SUCCESS , FAILED , MIGRATING , TERMINATED .
error	String	Error message.

Status code: 400

Table 4-244 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-245** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-246** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-247** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-248 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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](#).

4.6.10 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**.

Calling Method

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

URI

POST /v2/{project_id}/migration-task/batch-stop

Table 4-249 Path Parameters

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

Request Parameters

Table 4-250 Request body parameters

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

Response Parameters

Status code: 200

Table 4-251 Response body parameters

Parameter	Type	Description
migration_tasks	Array of StopMigrationTaskResult objects	Data migration task list.

Table 4-252 StopMigrationTaskResult

Parameter	Type	Description
result	String	Result of delivering the request for stopping migration tasks.
task_id	String	ID of the data migration task.

Status code: 400

Table 4-253 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-254** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-255** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-256 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-257 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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." NOTE The migration tasks are stopped when their status is TERMINATED .
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](#).

4.6.11 Stopping Synchronization of a Data Migration Task

Function

This API is used to stop synchronization of a data migration task.

Calling Method

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

URI

POST /v2/{project_id}/migration-task/{task_id}/sync-stop

Table 4-258 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 204

Synchronization of a data migration task stopped successfully.

Status code: 400

Table 4-259 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-260 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-261** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-262** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-263 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

None

Example Responses

None

Status Codes

Status Code	Description
204	Synchronization of a 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](#).

4.7 Tag Management

4.7.1 Listing All Tags of a Tenant

Function

This API is used to query the tags of all resources owned by a tenant in a specific project.

Calling Method

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

URI

GET /v2/{project_id}/dcs/tags

Table 4-264 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200**Table 4-265** Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	Parameter description: Tag list. Value range: N/A.

Table 4-266 Tag

Parameter	Type	Description
key	String	Parameter description: Tag key. The key contains a maximum of 128 characters. Value range: N/A.
values	Array of strings	Parameter description: Tag value. Value range: N/A.

Status code: 400**Table 4-267** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-268** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

POST https://{dcs_endpoint}/v2/{project_id}/dcs/tags

Example Responses

Status code: 200

Successfully queried all tags of the tenant.

```
{
  "tags": [ {
    "values": [ "value1", "value2" ],
    "key": "1"
  }, {
    "values": [ "value1", "value2" ],
    "key": "2"
  } ]
}
```

Status Codes

Status Code	Description
200	Successfully queried all tags of the tenant.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.7.2 Batch Adding or Deleting Tags

Function

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

Calling Method

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

URI

POST /v2/{project_id}/dcs/{instance_id}/tags/action

Table 4-269 Path Parameters

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

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.

Request Parameters

Table 4-270 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Operation to be performed. The value can be create or delete .
tags	Yes	Array of ResourceTag objects	Tag list.

Table 4-271 ResourceTag

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. • Must be unique for each resource. • Contains up to 128 characters. • Must be unique and cannot be empty.
value	No	String	Tag value. • This parameter is mandatory when action is set to create and is optional when action is set to delete. • It can contain a maximum of 255 characters.

Response Parameters

Status code: 204

Tags added or deleted successfully.

None

Example Requests

- Adding tags to a specified resource in batches

```
POST https://{dcs_endpoint}/v2/7dddae81f0e34f62adb9618bc8c8b1fe/dcs/01928d55-7020-4500-9c29-774caabe4bc4/tags/action
```

```
{
  "action": "create",
  "tags": [ {
    "value": "2",
    "key": "dcs001"
  }, {
    "value": "4",
    "key": "dcs003"
  } ]
}
```

- Deleting tags from a specified instance in batches

```
POST https://{dcs_endpoint}/v2/7dddae81f0e34f62adb9618bc8c8b1fe/dcs/01928d55-7020-4500-9c29-774caabe4bc4/tags/action
```

```
{
  "action": "delete",
  "tags": [ {
    "key": "key1",
    "value": "11"
  } ]
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Tags added or deleted successfully.

Error Codes

See [Error Codes](#).

4.7.3 Querying Tags of a DCS Instance

Function

This API is used to query the tags of an instance by its instance ID.

Calling Method

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

URI

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

Table 4-272 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-273 Response body parameters

Parameter	Type	Description
tags	Array of QueryResourceTag objects	Tag list.

Table 4-274 QueryResourceTag

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

Example Requests

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

Example Responses

Status code: 200

Instance tags queried successfully.

```
{
  "tags": [ {
    "value": "a",
    "key": "1"
  }, {
    "value": "b",
    "key": "2"
  } ]
}
```

Status Codes

Status Code	Description
200	Instance tags queried successfully.

Error Codes

See [Error Codes](#).

4.8 Cache Analysis

4.8.1 Creating a Big Key Analysis Task

Function

This API is used to create a big key analysis task for a DCS Redis instance.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/bigkey-task

Table 4-275 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-276 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the big key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the big key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.

Parameter	Type	Description
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of big keys. Value range: N/A
keys	Array of BigkeysBody objects	Parameter description: Big key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-277 BigkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash
shard	String	Parameter description: Shard where the big key is located. This parameter is available only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a big key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.

Status code: 400

Table 4-278 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-279** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403

Table 4-280 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-281** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-282 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

Big key analysis task created successfully.

```
{  
  "id" : "858ee14c-2271-4489-8b82-7bda7459ae3e",  
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "status" : "waiting",  
  "scan_type" : "manual",  
  "created_at" : "2020-06-15T02:21:18.669Z",  
  "num" : 0  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4919",  
  "error_msg" : "Does not support bigkey analyze."  
}
```

Status Codes

Status Code	Description
200	Big key analysis task created 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](#).

4.8.2 Listing Big Key Analysis Tasks

Function

This API is used to query the list of big key analysis tasks.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/bigkey-tasks

Table 4-283 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Table 4-284 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A Value range: 1-1000 Default value: 10

Parameter	Mandatory	Type	Description
status	No	String	Parameter description: Status of the big key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-285 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
count	Integer	Parameter description: Number of times that big keys are analyzed. Value range: N/A
records	Array of RecordsResponse objects	Parameter description: List of big key analysis record. Value range: N/A

Table 4-286 RecordsResponse

Parameter	Type	Description
id	String	Parameter description: Task execution record ID. (This ID corresponds to parameters bigkey_id and hotkey_id in the APIs for querying big key or hot key analysis details.) Value range: N/A
status	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-287** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-288** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-289** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-290** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-291 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

Big key analysis records queried successfully.

```
{
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",
  "count" : 1,
  "records" : [ {
    "id" : "858ee14c-2271-4489-8b82-7bda7459ae3e",
    "scan_type" : "manual",
    "status" : "success",
    "created_at" : "2020-06-15T02:21:18.669Z",
    "started_at" : "2020-06-15T02:21:23.534Z",
    "finished_at" : "2020-06-15T02:21:25.588Z"
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4919",
  "error_msg" : "Does not support bigkey analyze."
}
```

Status Codes

Status Code	Description
200	Big key analysis records 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](#).

4.8.3 Querying Big Key Analysis Details

Function

This API is used to query the big key analysis details.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/bigkey-task/{bigkey_id}

Table 4-292 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
bigkey_id	Yes	String	Parameter description: ID of the big key analysis task. The ID can be obtained by calling the Listing Big Key Analysis Tasks API. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-293 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the big key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the big key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of big keys. Value range: N/A
keys	Array of BigkeysBody objects	Parameter description: Big key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-294 BigkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash

Parameter	Type	Description
shard	String	Parameter description: Shard where the big key is located. This parameter is available only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a big key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.

Status code: 400**Table 4-295** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-296** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-297** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-298** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-299 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-cebf-4473-95c4-d1b573c16e79/bigkey-task/858ee14c-2271-4489-8b82-7bda7459ae3e
```

Example Responses

Status code: 200

Big key analysis details queried successfully.

```
{
  "id": "858ee14c-2271-4489-8b82-7bda7459ae3e",
  "instance_id": "5f9057b5-c330-4ee2-8138-7e69896eeec3",
  "status": "success",
  "scan_type": "manual",
  "created_at": "2020-06-15T02:21:18.669Z",
  "started_at": "2020-06-15T02:21:23.534Z",
  "finished_at": "2020-06-15T02:21:25.588Z",
  "keys": [ {
    "name": "dcs-bigkey-test",
    "type": "string",
    "shard": "192.168.1.134:6379",
    "db": 0,
    "size": 3000,
    "unit": "byte"
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4919",
}
```

```
"error_msg" : "Does not support bigkey analyze."  
}
```

Status Codes

Status Code	Description
200	Big key analysis details 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](#).

4.8.4 Deleting a Big Key Analysis Task

Function

This API is used to delete a big key analysis task.

Calling Method

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

URI

DELETE /v2/{project_id}/instances/{instance_id}/bigkey-task/{bigkey_id}

Table 4-300 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
bigkey_id	Yes	String	Parameter description: ID of the big key analysis task. The ID can be obtained by calling the Listing Big Key Analysis Tasks API. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-301 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the big key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the big key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of big keys. Value range: N/A
keys	Array of BigkeysBody objects	Parameter description: Big key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-302 BigkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash

Parameter	Type	Description
shard	String	Parameter description: Shard where the big key is located. This parameter is available only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a big key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.

Status code: 204

No big key analysis tasks deleted.

Status code: 400**Table 4-303** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-304** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-305** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-306** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-307 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

```
DELETE https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-cebf-4473-95c4-d1b573c16e79/bigkey-task/858ee14c-2271-4489-8b82-7bda7459ae3e
```

Example Responses

Status code: 200

Big key analysis task deleted successfully.

```
{
  "id": "858ee14c-2271-4489-8b82-7bda7459ae3e",
  "instance_id": "5f9057b5-c330-4ee2-8138-7e69896eeec3",
  "status": "success",
  "scan_type": "manual",
  "created_at": "2020-06-15T02:21:18.669Z",
  "started_at": "2020-06-15T02:21:23.534Z",
  "finished_at": "2020-06-15T02:21:25.588Z",
  "keys": [ {
    "name": "dcs-bigkey-test",
    "type": "string",
    "shard": "192.168.1.134:6379",
    "db": 0,
    "size": 3000,
    "unit": "byte"
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4919",
}
```

```
"error_msg" : "Does not support bigkey analyze."  
}
```

Status Codes

Status Code	Description
200	Big key analysis task deleted successfully.
204	No big key analysis tasks deleted.
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](#).

4.8.5 Configuring Automatic Big Key Analysis

Function

This API is used to configure automatic big key analysis.

Calling Method

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

URI

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

Table 4-308 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

Table 4-309 Request body parameters

Parameter	Mandatory	Type	Description
enable_auto_scan	Yes	Boolean	Parameter description: Whether to enable scheduled cache analysis. Constraints: N/A Value range: • true • false Default value: N/A

Parameter	Mandatory	Type	Description
schedule_at	Yes	Array of strings	Parameter description: UTC time of the day that cache analysis is scheduled for. Example: 21:00 . Constraints: N/A Value range: N/A Default value: N/A

Response Parameters

Status code: 200

Table 4-310 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
enable_auto_scan	Boolean	Parameter description: Whether to enable scheduled cache analysis. Value range: • true • false
schedule_at	Array of strings	Parameter description: UTC time of the day that analysis is scheduled for. Example: 21:00 . Value range: N/A
updated_at	String	Parameter description: Time when the configuration is updated. The time format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-311** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-312** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-313** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-314** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500**Table 4-315** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

Scheduling big key analysis tasks to start at 21:00 every day

```
PUT https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-  
cebf-4473-95c4-d1b573c16e79/bigkey/autoscan  
  
{  
  "enable_auto_scan": true,  
  "schedule_at": [ "21:00" ]  
}
```

Example Responses**Status code: 200**

Big key analysis task configured successfully.

```
{  
  "instance_id": "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "enable_auto_scan": true,  
  "schedule_at": [ "21:00" ],  
  "updated_at": "2020-06-17T02:42:40.793Z"  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code": "DCS.4919",  
  "error_msg": "Does not support bigkey analyze."  
}
```

Status Codes

Status Code	Description
200	Big key analysis task 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](#).

4.8.6 Querying the Configurations of Automatic Big Key Analysis

Function

This API is used to query configurations of automatic big key analysis.

Calling Method

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

URI

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

Table 4-316 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-317 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
enable_auto_scan	Boolean	Parameter description: Whether to enable scheduled cache analysis. Value range: • true • false
schedule_at	Array of strings	Parameter description: UTC time of the day that analysis is scheduled for. Example: 21:00 . Value range: N/A

Parameter	Type	Description
updated_at	String	Parameter description: Time when the configuration is updated. The time format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-318** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-319** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403

Table 4-320 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404

Table 4-321 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500**Table 4-322** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

This API is used to query configurations of automatic big key analysis.

```
{  
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "enable_auto_scan" : true,  
  "schedule_at" : [ "21:00" ],  
  "updated_at" : "2020-06-17T02:42:40.793Z"  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4919",  
  "error_msg" : "Does not support bigkey analyze."  
}
```

Status Codes

Status Code	Description
200	This API is used to query configurations of automatic big key analysis.
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](#).

4.8.7 Creating a Hot Key Analysis Task

Function

This API is used to create a hot key analysis task.

To perform hot key analysis, the instance's **maxmemory-policy** parameter must be set to **allkeys-lfu** or **volatile-lfu**.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/hotkey-task

Table 4-323 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-324 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the hot key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of hot keys. Value range: N/A
keys	Array of HotkeysBody objects	Parameter description: Hot key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-325 HotkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash

Parameter	Type	Description
shard	String	Parameter description: Shard where the hot key is located. This parameter is supported only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a hot key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.
freq	Integer	Parameter description: Reflects the access frequency of a key within a specific period of time. The value is the logarithmic access frequency counter. The maximum value is 255 , which indicates 1 million access requests. After the frequency reaches 255 , the value will no longer increase even if access requests continue to increase. The value will decrease by 1 for every minute during which the key is not accessed. Value range: N/A

Status code: 400

Table 4-326 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-327** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403

Table 4-328 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-329** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-330 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

Hot key analysis task created successfully.

```
{  
  "id" : "aa735b6f-3d70-44e3-9771-66c6fae7459a",  
  "instance_id" : "5560df16-cebf-4473-95c4-d1b573c16e79",  
  "status" : "waiting",  
  "scan_type" : "manual",  
  "created_at" : "2020-06-15T02:21:18.669Z",  
  "num" : 0  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4922",  
  "error_msg" : "Does not support hotkey analyze."  
}
```

Status Codes

Status Code	Description
200	Hot key analysis task created 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](#).

4.8.8 Listing Hot Key Analysis Tasks

Function

This API is used to query the list of hot key analysis tasks.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/hotkey-tasks

Table 4-331 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Table 4-332 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A Value range: 1-1000 Default value: 10

Parameter	Mandatory	Type	Description
status	No	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-333 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
count	Integer	Parameter description: Number of times that hot keys are analyzed. Value range: N/A
records	Array of RecordsResponse objects	Parameter description: List of hot key analysis record. Value range: N/A

Table 4-334 RecordsResponse

Parameter	Type	Description
id	String	Parameter description: Task execution record ID. (This ID corresponds to parameters bigkey_id and hotkey_id in the APIs for querying big key or hot key analysis details.) Value range: N/A
status	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-335** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-336** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-337** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-338** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-339 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

Hot key analysis tasks listed successfully.

```
{
  "instance_id": "5f9057b5-c330-4ee2-8138-7e69896eeec3",
  "count": 1,
  "records": [ {
    "id": "858ee14c-2271-4489-8b82-7bda7459ae3e",
    "scan_type": "manual",
    "status": "success",
    "created_at": "2020-06-15T02:21:18.669Z",
    "started_at": "2020-06-15T02:21:23.534Z",
    "finished_at": "2020-06-15T02:21:25.588Z"
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4922",
  "error_msg": "Does not support hotkey analyze."
}
```

Status Codes

Status Code	Description
200	Hot key analysis tasks 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](#).

4.8.9 Querying Hot Key Analysis Details

Function

This API is used to query the hot key analysis details.

Calling Method

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

URI

GET /v2/{project_id}/instances/{instance_id}/hotkey-task/{hotkey_id}

Table 4-340 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
hotkey_id	Yes	String	Parameter description: ID of the hot key analysis task. The ID can be obtained by calling the Listing Hot Key Analysis Tasks API. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-341 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the hot key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of hot keys. Value range: N/A
keys	Array of HotkeysBody objects	Parameter description: Hot key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-342 HotkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash

Parameter	Type	Description
shard	String	Parameter description: Shard where the hot key is located. This parameter is supported only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a hot key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.
freq	Integer	Parameter description: Reflects the access frequency of a key within a specific period of time. The value is the logarithmic access frequency counter. The maximum value is 255 , which indicates 1 million access requests. After the frequency reaches 255 , the value will no longer increase even if access requests continue to increase. The value will decrease by 1 for every minute during which the key is not accessed. Value range: N/A

Status code: 400

Table 4-343 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-344** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403

Table 4-345 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-346** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-347 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-  
cebf-4473-95c4-d1b573c16e79/hotkey-task/0ccb25d5-27cf-4188-b5ea-987730a85371
```

Example Responses

Status code: 200

Hot key analysis details queried successfully.

```
{  
  "id" : "858ee14c-2271-4489-8b82-7bda7459ae3e",  
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "status" : "success",  
  "scan_type" : "manual",  
  "created_at" : "2020-06-15T02:21:18.669Z",  
  "started_at" : "2020-06-15T02:21:23.534Z",  
  "finished_at" : "2020-06-15T02:21:25.588Z",  
  "keys" : [ {  
    "name" : "dcs-hotkey-test",  
    "type" : "string",  
    "shard" : "192.168.1.134:6379",  
    "db" : 0,  
    "size" : 3000,  
    "unit" : "byte",  
    "freq" : 4  
  } ]  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4922",  
}
```

```
"error_msg" : "Does not support hotkey analyze."  
}
```

Status Codes

Status Code	Description
200	Hot key analysis details 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](#).

4.8.10 Deleting a Hot Key Analysis Task

Function

This API is used to delete a hot key analysis task.

Calling Method

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

URI

DELETE /v2/{project_id}/instances/{instance_id}/hotkey-task/{hotkey_id}

Table 4-348 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A
hotkey_id	Yes	String	Parameter description: ID of the hot key analysis task. The ID can be obtained by calling the Listing Hot Key Analysis Tasks API. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-349 Response body parameters

Parameter	Type	Description
id	String	Parameter description: ID of the hot key analysis task. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the hot key analysis task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Analysis method. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when an analysis task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when an analysis task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when an analysis task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the analysis task is being created.) Value range: N/A
num	Integer	Parameter description: Number of hot keys. Value range: N/A
keys	Array of HotkeysBody objects	Parameter description: Hot key record. (The value is null and is not returned when the analysis task is being created.) Value range: N/A

Table 4-350 HotkeysBody

Parameter	Type	Description
name	String	Parameter description: Key name. Value range: N/A
type	String	Parameter description: Key type. Value range: • string • list • set • zset • hash

Parameter	Type	Description
shard	String	Parameter description: Shard where the hot key is located. This parameter is supported only when the instance type is cluster. The format is <i>ip:port</i> . Value range: N/A
db	Integer	Parameter description: Database where a hot key is located. Value range: 0-255
size	Long	Parameter description: Size of the key value. Value range: N/A
unit	String	Parameter description: Key unit. Value range: • count: number of keys. • byte: key size.
freq	Integer	Parameter description: Reflects the access frequency of a key within a specific period of time. The value is the logarithmic access frequency counter. The maximum value is 255 , which indicates 1 million access requests. After the frequency reaches 255 , the value will no longer increase even if access requests continue to increase. The value will decrease by 1 for every minute during which the key is not accessed. Value range: N/A

Status code: 204

Hot key analysis record not found.

Status code: 400

Table 4-351 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-352** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403

Table 4-353 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-354** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500

Table 4-355 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

```
DELETE https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-cebf-4473-95c4-d1b573c16e79/hotkey-task/0ccb25d5-27cf-4188-b5ea-987730a85371
```

Example Responses

Status code: 200

Hot key analysis record deleted.

```
{
  "id" : "858ee14c-2271-4489-8b82-7bda7459ae3e",
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",
  "status" : "success",
  "scan_type" : "manual",
  "created_at" : "2020-06-15T02:21:18.669Z",
  "started_at" : "2020-06-15T02:21:23.534Z",
  "finished_at" : "2020-06-15T02:21:25.588Z",
  "keys" : [ {
    "name" : "dcs-hotkey-test",
    "type" : "string",
    "shard" : "192.168.1.134:6379",
    "db" : 0,
    "size" : 3000,
    "unit" : "byte",
    "freq" : 4
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4922",
}
```

```
"error_msg" : "Does not support hotkey analyze."  
}
```

Status Codes

Status Code	Description
200	Hot key analysis record deleted.
204	Hot key analysis record not found.
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](#).

4.8.11 Configuring Automatic Hot Key Analysis

Function

This API is used to configure automatic hot key analysis.

Calling Method

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

URI

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

Table 4-356 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

Table 4-357 Request body parameters

Parameter	Mandatory	Type	Description
enable_auto_scan	Yes	Boolean	Parameter description: Whether to enable scheduled cache analysis. Constraints: N/A Value range: • true • false Default value: N/A

Parameter	Mandatory	Type	Description
schedule_at	Yes	Array of strings	Parameter description: UTC time of the day that cache analysis is scheduled for. Example: 21:00 . Constraints: N/A Value range: N/A Default value: N/A

Response Parameters

Status code: 200

Table 4-358 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
enable_auto_scan	Boolean	Parameter description: Whether to enable scheduled cache analysis. Value range: • true • false
schedule_at	Array of strings	Parameter description: UTC time of the day that analysis is scheduled for. Example: 21:00 . Value range: N/A
updated_at	String	Parameter description: Time when the configuration is updated. The time format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-359** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-360** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-361** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404**Table 4-362** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500**Table 4-363** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

Scheduling hot key analysis tasks to start at 21:00 every day

```
PUT https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-  
cebf-4473-95c4-d1b573c16e79/hotkey/autoscan  
  
{  
  "enable_auto_scan": true,  
  "schedule_at": [ "21:00" ]  
}
```

Example Responses**Status code: 200**

Automatic hot key analysis configured successfully.

```
{  
  "instance_id": "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "enable_auto_scan": true,  
  "schedule_at": [ "21:00" ],  
  "updated_at": "2020-06-17T02:42:40.793Z"  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code": "DCS.4922",  
  "error_msg": "Does not support hotkey analyze."  
}
```

Status Codes

Status Code	Description
200	Automatic hot key analysis 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](#).

4.8.12 Querying the Configurations of Automatic Hot Key Analysis

Function

This API is used to query configurations of automatic hot key analysis.

Calling Method

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

URI

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

Table 4-364 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-365 Response body parameters

Parameter	Type	Description
instance_id	String	Parameter description: Instance ID. Value range: N/A
enable_auto_scan	Boolean	Parameter description: Whether to enable scheduled cache analysis. Value range: • true • false
schedule_at	Array of strings	Parameter description: UTC time of the day that analysis is scheduled for. Example: 21:00 . Value range: N/A

Parameter	Type	Description
updated_at	String	Parameter description: Time when the configuration is updated. The time format is 2020-06-15T02:21:18.669Z . Value range: N/A

Status code: 400**Table 4-366** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-367** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-368** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404

Table 4-369 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500**Table 4-370** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

This API is used to query configurations of automatic hot key analysis.

```
{  
  "instance_id" : "5f9057b5-c330-4ee2-8138-7e69896eeec3",  
  "enable_auto_scan" : true,  
  "schedule_at" : [ "21:00" ],  
  "updated_at" : "2020-06-17T02:42:40.793Z"  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4922",  
  "error_msg" : "Does not support hotkey analyze."  
}
```

Status Codes

Status Code	Description
200	This API is used to query configurations of automatic hot key analysis.
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](#).

4.8.13 Creating an Expired Key Scan Task

Function

This API is used to create an expired key scan task.

The keyspace will be scanned to release the memory used by expired keys that were not released due to the lazy free mechanism.

This scan is on the master node of the instance and will affect instance performance. Perform this operation during off-peak hours.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/scan-expire-keys-task

Table 4-371 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A Value range: N/A Default value: N/A
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A Value range: N/A Default value: N/A

Request Parameters

None

Response Parameters

Status code: 200

Table 4-372 Response body parameters

Parameter	Type	Description
id	String	Parameter description: Expired key scan ID. Value range: N/A
instance_id	String	Parameter description: Instance ID. Value range: N/A
status	String	Parameter description: Status of the expired key scan task. Value range: • waiting: The task is to be processed. • running: The task is being processed. • success: The task is successful. • failed: The task fails.
scan_type	String	Parameter description: Scan mode. Value range: • manual: manual analysis. • auto: automatic analysis.
created_at	String	Parameter description: Time when a scan task is created. The format is 2020-06-15T02:21:18.669Z . Value range: N/A
started_at	String	Parameter description: Time when a scan task started. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the scan task is being created.) Value range: N/A

Parameter	Type	Description
finished_at	String	Parameter description: Time when a scan task ended. The format is 2020-06-15T02:21:18.669Z . (The value is null and is not returned when the scan task is being created.) Value range: N/A

Status code: 400**Table 4-373** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 401**Table 4-374** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 403**Table 4-375** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 404

Table 4-376 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Status code: 500**Table 4-377** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error information. Value range: N/A
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A

Example Requests

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

Example Responses

Status code: 200

Expired key scan task created successfully.

```
{  
  "id" : "aa735b6f-3d70-44e3-9771-66c6fae7459a",  
  "instance_id" : "5560df16-cebf-4473-95c4-d1b573c16e79",  
  "status" : "waiting",  
  "scan_type" : "manual",  
  "created_at" : "2020-06-15T02:21:18.669Z"  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4818",  
  "error_msg" : "Do not support auto expire scan."  
}
```

Status Codes

Status Code	Description
200	Expired key scan task created 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 Log Management

4.9.1 Querying the Slow Log

Function

This API is used to query slow logs.

Calling Method

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

URI

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

Table 4-378 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.
instance_id	Yes	String	Parameter description: Instance ID. It can be viewed on the instance details page on the DCS console. Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-379 Query Parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A. Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–1,000 Default value: 10
sort_key	No	String	Parameter description: Keyword based on which the returned results are sorted. Constraints: N/A. Value range: • start_time: start time of the slow query log. • duration: duration of the slow query log. Default value: start_time

Parameter	Mandatory	Type	Description
sort_dir	No	String	Parameter description: Result sorting order. Constraints: N/A. Value range: • desc: descending order • asc: ascending order Default value: desc
start_time	Yes	String	Parameter description: Query start time (UTC). Example: 1598803200000 . Constraints: N/A. Value range: N/A. Default value: N/A.
end_time	Yes	String	Parameter description: Query end time (UTC). Example: 1599494399000 . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-380 Response body parameters

Parameter	Type	Description
total_num	Integer	Parameter description: Total number of slow logs. Value range: N/A.
count	Integer	Parameter description: Total number of slow logs. Value range: N/A.
slowlogs	Array of SlowlogItem objects	Parameter description: Slow log list. Value range: N/A.

Table 4-381 SlowlogItem

Parameter	Type	Description
id	Integer	Parameter description: Unique ID of a slow log. Value range: N/A.
command	String	Parameter description: Slow command. Value range: N/A.
start_time	String	Parameter description: Execution start time. Example: 2020-06-19T07:06:07Z . Value range: N/A.
duration	String	Parameter description: Duration, in ms. Value range: N/A.

Parameter	Type	Description
shard_name	String	Parameter description: Name of the shard where the slow command is executed. This parameter is supported only when the instance type is cluster. Value range: N/A.
database_id	Integer	Parameter description: Database ID, which is available only to some customers. Value range: 0-255
username	String	Parameter description: Account name that can operate on slow logs. This parameter is available only to some customers. Value range: N/A.
node_role	String	Parameter description: Node type. Value range: N/A
client_ip	String	Parameter description: Client IP address. Value range: N/A

Status code: 400**Table 4-382** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-383** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403

Table 4-384 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-385** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-386 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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",
    "node_role" : "master",
    "client_ip" : "127.0.0.1:6379"
  } ]
}
```

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.
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 Redis Run Logs

Function

This API is used to query the Redis run logs.

Calling Method

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

URI

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

Table 4-387 Path Parameters

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

Table 4-388 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.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of items displayed on each page.
log_type	Yes	String	Log type. Currently, only Redis run logs are supported. The value is run .

Request Parameters

None

Response Parameters

Status code: 200

Table 4-389 Response body parameters

Parameter	Type	Description
total_num	Integer	Total.
file_list	Array of RunlogItem objects	Run log list.

Table 4-390 RunlogItem

Parameter	Type	Description
id	String	Unique ID of a run log.
file_name	String	Run log file name.
group_name	String	Shard name.
replication_ip	String	IP address of the replica where the run logs are collected.
status	String	Run log status.
time	String	Date when run logs are collected. The format is yyyy-MM-dd.
backup_id	String	Log file ID.

Status code: 204

Queried successfully and no log is found.

Status code: 400**Table 4-391** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-392** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-393** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-394** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-395** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-  
cebf-4473-95c4-d1b573c16e79/redislog?  
log_type=run&offset=1&limit=10&replication_id=50fa23b4-74d3-4d5c-98b9-39188a1f2daf
```

Example Responses**Status code: 200**

Run logs queried successfully. If there is no log, **204** is returned.

```
{  
  "total_num" : 1,  
  "file_list" : [ {  
    "id" : "e79f2d97-e972-41f2-b51c-d18f65f39a45",  
    "file_name" : "redis_192.168.0.142_2021-04-16.log",  
    "status" : "succeed",  
    "time" : "2021-04-16",  
    "replication_ip" : "192.168.0.142",  
    "group_name" : "group-0",  
    "backup_id" : "e79f2d97-e972-41f2-b51c-d18f65f39a45"  
  } ]  
}
```

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4800",  
  "error_msg" : "Invalid logType."  
}
```

Status Codes

Status Code	Description
200	Run logs queried successfully. If there is no log, 204 is returned.
204	Queried successfully and no log is found.
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](#).

4.9.3 Collecting Redis Run Logs

Function

This API is used to collect Redis run logs.

Calling Method

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

URI

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

Table 4-396 Path Parameters

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

Table 4-397 Query Parameters

Parameter	Mandatory	Type	Description
query_time	No	Integer	Date offset, indicating that the query starts from the last <i>n</i> days. The default value is 0 . Value range: 0 , 1 , 3 , and 7 . For example, the value 0 indicates that the logs of the current day are queried, and the value 7 indicates that the logs of the last seven days are queried.
log_type	Yes	String	Log type. Currently, only Redis run logs are supported. The value is run .
replication_id	No	String	Replica ID. You can query the replica ID from Shards and Replicas . This parameter is mandatory when the instance is not single-node.

Request Parameters

None

Response Parameters

Status code: 204
Run logs collected successfully.

Status code: 400

Table 4-398 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-399** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-400** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-401** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-402 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
POST https://{dcs_endpoint}/v2/a4d31cb6-3d72-4fdc-8ec9-6e3a41e47f71/instances/5560df16-cebf-4473-95c4-d1b573c16e79/redislog?log_type=run&query_time=7&replication_id=50fa23b4-74d3-4d5c-98b9-39188a1f2daf
```

Example Responses

Status code: 400

Invalid request.

```
{  "error_code" : "DCS.4800",  "error_msg" : "Invalid logType."}
```

Status Codes

Status Code	Description
204	Run logs collected 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](#).

4.9.4 Obtaining the Log Download Link

Function

This API is used to obtain the link for downloading logs.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/redislog/{id}/links

Table 4-403 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.
id	Yes	String	Unique ID of a log, which is obtained from the API used to query run logs.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-404 Response body parameters

Parameter	Type	Description
id	String	Log ID.

Parameter	Type	Description
backup_id	String	Background task ID.
link	String	Log download link. The default validity period is 24 hours.

Status code: 400**Table 4-405** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-406** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-407** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-408** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.

Parameter	Type	Description
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500

Table 4-409 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
POST https://{dcs_endpoint}/v2/0524e839a54847039e9b2b46e8aa788a/instances/5c597ce5-9823-48aa-bf4d-2defb9385b4a/redislog/3ea6ce21-048e-447a-83c3-3fb004b88439/links
```

Example Responses

Status code: 200

Log download link obtained successfully.

```
{
  "id" : "3ea6ce21-048e-447a-83c3-3fb004b88439",
  "backup_id" : "3ea6ce21-048e-447a-83c3-3fb004b88439",
  "link" : "https://bucketxxxxx.{obs_endpoint}:443/xxxxx/redis_192.168.x.x_2021-04-16.log?
AWSAccessKeyId=xxxxx"
}
```

Status Codes

Status Code	Description
200	Log download link obtained 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](#).

4.10 Account Management

4.10.1 Creating an ACL Account

Function

This API is used to create an account with read/write or read-only permissions for a DCS Redis 4.0 or 5.0 instance.

If the default user has enabled password-free access, normal users cannot use the instance. To allow normal users to use the instance, disable password-free access.

The password of the default user of a single-node or master/standby instance cannot contain colons (:). Otherwise, normal users cannot be created.

Calling Method

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

URI

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

Table 4-410 Path Parameters

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

Request Parameters

Table 4-411 Request body parameters

Parameter	Mandatory	Type	Description
account_name	Yes	String	Account name. - Starts with a letter. - Can contain only letters, digits, hyphens (-), and underscores (_). - Can contain 1 to 64 characters.
account_role	Yes	String	Account permission. Options: read (read-only) and write (read/write).
account_password	Yes	String	Account password. - Can contain 8 to 64 characters. - Cannot use the username spelled forwards or backwards. - Must contain at least three of the following character types (colons are not allowed): - Lowercase letters - Uppercase letters - Digits - Special characters `~!@#\$%^&*()-_+=+\\ {}'",<.>/?
description	No	String	Account description.

Response Parameters

Status code: 200

The ACL account creation task is successfully delivered.

Status code: 400

Table 4-412 Response body parameters

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

Status code: 401

Table 4-413 Response body parameters

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

Status code: 403

Table 4-414 Response body parameters

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

Status code: 404

Table 4-415 Response body parameters

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

Status code: 500**Table 4-416** Response body parameters

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

Example Requests

Creating a read-only ACL account named **user**.

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/accounts
{
  "account_name": "user",
  "account_role": "read",
  "account_password": "xxxxx"
}
```

Example Responses

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4961",
  "error_msg": "Acl account request param invalid."
}
```

Status Codes

Status Code	Description
200	The ACL account creation task is successfully delivered.
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](#).

4.10.2 Listing ACL Accounts

Function

This API is used to query the ACL account list.

Calling Method

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

URI

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

Table 4-417 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-418 Response body parameters

Parameter	Type	Description
accounts	Array of AclAccountResp objects	ACL account list.

Table 4-419 AclAccountResp

Parameter	Type	Description
account_id	String	Account ID.
account_name	String	Account name.
account_type	String	Account type. Options: normal and default .
instance_id	String	ID of the instance to which the account belongs.
status	String	ACL account status. Options: • CREATING: The account is being created. • AVAILABLE: The account is available. • DELETEFAILED: The account fails to be deleted. • DELETING: The account is being deleted. • UPDATING: The account is being updated. • ERROR: The account is abnormal.
account_role	String	Account permission. Options: read (read-only) and write (read/write).
description	String	Account description.
error_code	String	Error code. This parameter is not used currently and is set to null.

Status code: 400

Table 4-420 Response body parameters

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

Status code: 401**Table 4-421** Response body parameters

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

Status code: 403**Table 4-422** Response body parameters

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

Status code: 404**Table 4-423** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 500

Table 4-424 Response body parameters

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

Example Requests

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

Example Responses

Status code: 200

ACL accounts listed successfully.

```
{
  "accounts": [ {
    "account_id": "cb067c67-f08b-4024-af14-f78b58b76a44",
    "account_name": "roUser",
    "account_type": "normal",
    "instance_id": "10fda556-51c3-4cfa-ab6f-37667428da6e",
    "status": "available",
    "account_role": "read",
    "description": "This is a read-only account.",
    "error_code": null
  } ]
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4964",
  "error_msg": "Failed to query acl list."
}
```

Status Codes

Status Code	Description
200	ACL accounts listed 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](#).

4.10.3 Changing the Password of an ACL Account

Function

This API is used to change the password of an ACL account.

Calling Method

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

URI

PUT /v2/{project_id}/instances/{instance_id}/accounts/{account_id}/password/
modify

Table 4-425 Path Parameters

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

Request Parameters

Table 4-426 Request body parameters

Parameter	Mandatory	Type	Description
old_password	No	String	Old password.
new_password	No	String	New password. • Can contain 8 to 64 characters. • Cannot contain the username or the username spelled backwards. • Must contain at least three of the following character types (colons are not allowed): – Lowercase letters – Uppercase letters – Digits – Special characters (~!@#\$%^&*()-_+= {}<.>/?)

Response Parameters

Status code: 200**Table 4-427** Response body parameters

Parameter	Type	Description
lock_time	String	Lock duration. If the password authentication fails and the account is locked, a response is returned and is not null .
result	String	Password change result: • success: Password changed. • passwordFailed: Password authentication failed. • locked: The account has been locked. • failed: Password change failed.

Parameter	Type	Description
lock_time_left	String	Remaining time before the account is unlocked. When the account is locked, a response is returned and is not null .
retry_times_left	String	Number of remaining password attempts. If the password authentication fails, a response is returned and is not null .
message	String	Modification result description.

Status code: 400**Table 4-428** Response body parameters

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

Status code: 401**Table 4-429** Response body parameters

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

Status code: 403**Table 4-430** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.

Parameter	Type	Description
error_code	String	Error code.
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 404**Table 4-431** Response body parameters

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

Status code: 500**Table 4-432** Response body parameters

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

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/accounts/{account_id}/password/modify
{
  "old_password": "xxxxxx",
  "new_password": "xxxxxx"
}
```

Example Responses**Status code: 200**

Password changed.

```
{
  "lock_time": "0",
}
```

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

Status code: 400

Invalid request.

```
{  
  "error_code" : "DCS.4961",  
  "error_msg" : "Acl account request param invalid."  
}
```

Status Codes

Status Code	Description
200	Password changed.
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](#).

4.10.4 Resetting the Password of an ACL Account

Function

This API is used to reset the password of an ACL account.

Calling Method

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

URI

PUT /v2/{project_id}/instances/{instance_id}/accounts/{account_id}/password/reset

Table 4-433 Path Parameters

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

Request Parameters

Table 4-434 Request body parameters

Parameter	Mandatory	Type	Description
old_password	No	String	Old password.
new_password	No	String	New password. • Can contain 8 to 64 characters. • Cannot contain the username or the username spelled backwards. • Must contain at least three of the following character types (colons are not allowed): – Lowercase letters – Uppercase letters – Digits – Special characters (~!@#\$%^&*()-_+= }{,<.>/?)

Response Parameters

Status code: 200

Table 4-435 Response body parameters

Parameter	Type	Description
code	String	Code indicating successful task execution.
message	String	Reset result description.

Parameter	Type	Description
lock_time	String	Lock duration. If the authentication fails and the account is locked, a response is returned and is not null .
lock_time_left	String	Remaining time before the account is unlocked. When the account is locked, a response is returned and is not null .
retry_times_left	String	Number of remaining password attempts. If the authentication fails, a response is returned and is not null .

Status code: 400**Table 4-436** Response body parameters

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

Status code: 401**Table 4-437** Response body parameters

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

Status code: 403**Table 4-438** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.

Parameter	Type	Description
error_code	String	Error code.
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 404**Table 4-439** Response body parameters

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

Status code: 500**Table 4-440** Response body parameters

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

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/accounts/{account_id}/password/reset"
{
  "old_password": "xxxxxx",
  "new_password": "xxxxxx"
}
```

Example Responses**Status code: 200**

Password reset.

```
{
  "code": "1",
```

```
"message" : "Reset DCSInstance password success.",
"lock_time" : "0",
"lock_time_left" : "0",
"retry_times_left" : "5"
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4961"
}
```

Status Codes

Status Code	Description
200	Password reset.
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](#).

4.10.5 Modifying an ACL Account Role

Function

This API is used to modify the role of an ACL account.

Calling Method

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

URI

PUT /v2/{project_id}/instances/{instance_id}/accounts/{account_id}/role

Table 4-441 Path Parameters

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

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.
account_id	Yes	String	ACL account ID.

Request Parameters

Table 4-442 Request body parameters

Parameter	Mandatory	Type	Description
account_role	No	String	Account permission. Options: read (read-only) and write (read/write).

Response Parameters

Status code: 200

Table 4-443 Response body parameters

Parameter	Type	Description
instance_id	String	ID of the instance to which the account belongs.
job_id	String	ID of the job for modifying the access permission of an ACL account.

Status code: 400

Table 4-444 Response body parameters

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

Status code: 401

Table 4-445 Response body parameters

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

Status code: 403**Table 4-446** Response body parameters

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

Status code: 404**Table 4-447** Response body parameters

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

Status code: 500**Table 4-448** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/accounts/{account_id}/role
{
  "account_role": "read"
}
```

Example Responses

Status code: 200

Password reset.

```
{
  "job_id": "ff80808284d4c6d50184e8cff10248bd",
  "instance_id": "10fda556-51c3-4cfa-ab6f-37667428da6e"
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4961",
  "error_msg": "Acl account request param invalid."
}
```

Status Codes

Status Code	Description
200	Password reset.
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](#).

4.10.6 Deleting an ACL Account

Function

This API is used to delete a normal ACL account.

Calling Method

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

URI

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

Table 4-449 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

The ACL account deletion task is successfully delivered.

Status code: 400

Table 4-450 Response body parameters

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

Status code: 401

Table 4-451 Response body parameters

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

Status code: 403**Table 4-452** Response body parameters

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

Status code: 404**Table 4-453** Response body parameters

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

Status code: 500**Table 4-454** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Example Requests

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

Example Responses

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4961",
  "error_msg" : "Acl account request param invalid."
}
```

Status Codes

Status Code	Description
200	The ACL account deletion task is successfully delivered.
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](#).

4.10.7 Modifying Description of an ACL Account

Function

This API is used to modify the description of an ACL account.

Calling Method

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

URI

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

Table 4-455 Path Parameters

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

Request Parameters

Table 4-456 Request body parameters

Parameter	Mandatory	Type	Description
description	No	String	Remarks.

Response Parameters

Status code: 204

Description of an ACL account modified.

Status code: 400

Table 4-457 Response body parameters

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

Status code: 401

Table 4-458 Response body parameters

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

Status code: 403**Table 4-459** Response body parameters

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

Status code: 404**Table 4-460** Response body parameters

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

Status code: 500**Table 4-461** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/accounts/{account_id}
{
  "description" : "Test"
}
```

Example Responses

None

Status Codes

Status Code	Description
204	Description of an ACL account modified.
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](#).

4.11 Network Security

4.11.1 Enabling or Disabling SSL

Function

This API is used to configure SSL. This API is only supported by single-node, master/standby, and Redis Cluster DCS Redis 6.0 basic edition instances.

Calling Method

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

URI

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

Table 4-462 Path Parameters

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

Request Parameters

Table 4-463 Request body parameters

Parameter	Mandatory	Type	Description
enabled	Yes	Boolean	Enabling or disabling SSL.

Response Parameters

Status code: 200

Table 4-464 Response body parameters

Parameter	Type	Description
job_id	String	DCS task ID.
instance_id	String	Instance ID.

Status code: 400

Table 4-465 Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 500

Table 4-466 Response body parameters

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

Example Requests

```
PUT https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/ssl
{
  "enabled" : true
}
```

Example Responses

Status code: 200

SSL enabled or disabled.

```
{
  "job_id" : "ff8080817fe01bb2017fe3cf68860481",
  "instance_id" : "5560df16-cebf-4473-95c4-d1b573c16e79"
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4201",
  "error_msg" : "Do not support SSL."
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "DCS.5010",
  "error_msg" : "Failed to operate SSL in database."
}
```

Status Codes

Status Code	Description
200	SSL enabled or disabled.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.11.2 Querying SSL Encryption of an Instance

Function

This API is used to query SSL encryption of an instance. This API is only supported by DCS Redis 6.0 instances.

Calling Method

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

URI

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

Table 4-467 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-468 Response body parameters

Parameter	Type	Description
enabled	Boolean	This parameter is returned with true only when SSL is enabled for the instance.
ip	String	IPv4 address used when SSL is enabled.
ipv6	String	IPv6 address used when SSL is enabled.
port	String	Port used when SSL is enabled.
domain_name	String	Domain name used when SSL is enabled.
ssl_expired_at	String	SSL certificate validity period (UTC time).
ssl_validated	Boolean	Whether the SSL certificate is valid.

Status code: 204

No SSL info.

Status code: 400**Table 4-469** Response body parameters

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

Status code: 500**Table 4-470** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Example Requests

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

Example Responses

Status code: 200

Instance SSL queried successfully.

```
{
  "enabled" : true,
  "ip" : "192.168.0.5",
  "ipv6" : "::1",
  "port" : "6379",
  "domain_name" : "redis-553a2516-b865-4159-b774-204dc0a36e37.dcs.example.com:6379",
  "ssl_expired_at" : "2022-06-15T02:21:18.669Z",
  "ssl_validated" : true
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4201",
  "error_msg" : "Do not support SSL."
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "DCS.5010",
  "error_msg" : "Failed to operate SSL in database."
}
```

Status Codes

Status Code	Description
200	Instance SSL queried successfully.
204	No SSL info.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.11.3 Downloading the SSL Certificate of an Instance

Function

This API is used to download the SSL certificate of an instance. This API is only supported by DCS Redis 6.0 instances.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/ssl-certs/download

Table 4-471 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-472 Response body parameters

Parameter	Type	Description
file_name	String	SSL certificate file name.
link	String	Download link of the SSL certificate.
bucket_name	String	Name of the OBS bucket for storing the SSL certificate.

Status code: 400

Table 4-473 Response body parameters

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

Status code: 500**Table 4-474** Response body parameters

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

Example Requests

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/ssl-certs/download
```

Example Responses

Status code: 200

SSL certificate of the instance downloaded.

```
{
  "bucket_name" : "bucket_name",
  "file_name" : "file_name",
  "link" : "https://{bucket_name}.obs_endpoint:443/{ssl-XXX}/{file_name}?
AWSAccessKeyId=XXX&Expires=XXX&Signature=XXX"
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4201",
  "error_msg" : "Do not support SSL."
}
```

Status code: 500

Internal service error.

```
{
  "error_code" : "DCS.5010",
}
```

```
"error_msg" : "Failed to operate SSL in database."  
}
```

Status Codes

Status Code	Description
200	SSL certificate of the instance downloaded.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.11.4 Configuring IP Whitelist Groups

Function

This API is used to configure IP address whitelist groups for a specific instance, including creating, disabling, editing, and deleting a whitelist. New whitelist settings will overwrite the existing setting. Therefore, save the existing whitelist before you add a new one.

Calling Method

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

URI

PUT /v2/{project_id}/instance/{instance_id}/whitelist

Table 4-475 Path Parameters

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

Request Parameters

Table 4-476 Request body parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	Instance ID.
enable_whitelist	Yes	Boolean	Whether to enable the whitelist. The options are true and false .
whitelist	Yes	Array of Whitelist objects	IP whitelist group. New whitelist settings will overwrite the existing setting. Therefore, save the existing whitelist before you add a new one.

Table 4-477 Whitelist

Parameter	Mandatory	Type	Description
group_name	Yes	String	Parameter description: Whitelist group name. Constraints: Four unique groups can be created for each instance. Value range: N/A Default value: N/A
ip_list	Yes	Array of strings	Parameter description: IP list in a whitelist group. Separate multiple ones with commas (,). Constraints: An instance's IPs must be unique. IP address 0.0.0.0 and IP address range 0.0.0.0/0 are not supported. Value range: N/A Default value: N/A

Response Parameters

Status code: 204

IP whitelist groups configured successfully.

Status code: 400

Table 4-478 Response body parameters

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

Status code: 401

Table 4-479 Response body parameters

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

Status code: 403

Table 4-480 Response body parameters

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

Status code: 404

Table 4-481 Response body parameters

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

Status code: 500**Table 4-482** Response body parameters

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

Example Requests

- Enabling the whitelist and configuring IP addresses allowed to access the instance

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

```
{
  "enable_whitelist" : true,
  "whitelist" : [ {
    "group_name" : "test001",
    "ip_list" : [ "10.10.10.1", "10.10.10.2" ]
  } ]
}
```

- Enabling the whitelist and configuring subnet mask allowed to access the instance.

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

Example Responses

None

Status Codes

Status Code	Description
204	IP whitelist groups 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](#).

4.11.5 Querying the IP Whitelist of a DCS Instance

Function

This API is used to query the IP address whitelist of a specific instance.

Calling Method

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

URI

GET /v2/{project_id}/instance/{instance_id}/whitelist

Table 4-483 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-484 Response body parameters

Parameter	Type	Description
instance_id	String	Instance ID.
enable_whitelist	Boolean	Whether to enable the whitelist.
whitelist	Array of Whitelist objects	Current instance IP whitelist.
whitelist_ip_limit_num	String	Maximum number of IP addresses allowed in the IP whitelist of a tenant instance.

Table 4-485 Whitelist

Parameter	Type	Description
group_name	String	Parameter description: Whitelist group name. Constraints: Four unique groups can be created for each instance. Value range: N/A Default value: N/A
ip_list	Array of strings	Parameter description: IP list in a whitelist group. Separate multiple ones with commas (,). Constraints: An instance's IPs must be unique. IP address 0.0.0.0 and IP address range 0.0.0.0/0 are not supported. Value range: N/A Default value: N/A

Example Requests

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

Example Responses

Status code: 200

Instance whitelist queried successfully.

```
{
  "instance_id" : "5560df16-cebf-4473-95c4-d1b573c16e79",
  "enable_whitelist" : true,
  "whitelist" : [ {
    "group_name" : "test001",
    "ip_list" : [ "10.10.10.1", "10.10.10.2" ]
  } ],
  "whitelist_ip_limit_num" : 20
}
```

Status Codes

Status Code	Description
200	Instance whitelist queried successfully.

Error Codes

See [Error Codes](#).

4.12 Background Task Management

4.12.1 Listing Background Tasks

Function

This API is used to query background tasks.

Calling Method

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

URI

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

Table 4-486 Path Parameters

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

Table 4-487 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.
start_time	No	String	Query start time (UTC). Format: yyyyMMddHHmmss, for example, 20200609160000 .
end_time	No	String	Query end time (UTC). Format: yyyyMMddHHmmss, for example, 20200617155959 .

Request Parameters

None

Response Parameters

Status code: 200

Table 4-488 Response body parameters

Parameter	Type	Description
task_count	String	Number of tasks.
tasks	Array of SingleBackgroundTask objects	Task details array.

Table 4-489 SingleBackgroundTask

Parameter	Type	Description
id	String	Background task ID.

Parameter	Type	Description
name	String	Background task name. The options are as follows: EXTEND : modifying specifications BindEip : enabling public access UnBindEip : disabling public access AddReplica : adding replicas DelReplica : deleting replicas AddWhitelist : configuring an IP whitelist UpdatePort : changing the port RemoveIpFromDns : removing IP addresses masterStandbySwapJob : master/standby switchover modify : changing the password
details	DetailsBody 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 4-490 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.

Parameter	Type	Description
enable_public_ip	Boolean	Whether to enable public access. This parameter has a value only when public access is enabled.
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.

Parameter	Type	Description
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.
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_configuration_length	Integer	Length of the updated configuration item.

Status code: 400**Table 4-491** Response body parameters

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

Status code: 401**Table 4-492** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 403**Table 4-493** Response body parameters

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

Status code: 404**Table 4-494** Response body parameters

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

Status code: 500**Table 4-495** Response body parameters

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

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](#).

4.12.2 Deleting a Background Task

Function

Deleting a background task.

Calling Method

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

URI

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

Table 4-496 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-497 Response body parameters

Parameter	Type	Description
message	String	Returned message.

Status code: 204

Background task deleted successfully.

Status code: 400**Table 4-498** Response body parameters

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

Status code: 401**Table 4-499** Response body parameters

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

Status code: 403**Table 4-500** Response body parameters

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

Status code: 404

Table 4-501 Response body parameters

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

Status code: 500**Table 4-502** Response body parameters

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

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.

Status Code	Description
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](#).

4.12.3 Querying the Job Execution Result of a Tenant

Function

This API is used to query the task execution result.

Calling Method

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

URI

GET /v2/{project_id}/jobs/{job_id}

Table 4-503 Path Parameters

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

Request Parameters

None

Response Parameters

Status code: 200

Table 4-504 Response body parameters

Parameter	Type	Description
job_id	String	Task ID.
job_type	String	Job type. Options: • masterStandbySwapJob: switching master and standby nodes • modifyClientIpTransJob: modifying source IP pass-through
status	String	Job status. Values: • INIT: To be executed. • RUNNING: Executing. • SUCCESS: Successful. • FAIL: Failed.
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 4-505** Response body parameters

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

Status code: 401**Table 4-506** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 403**Table 4-507** Response body parameters

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

Status code: 404**Table 4-508** Response body parameters

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

Status code: 500**Table 4-509** Response body parameters

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

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/jobs/{job_id}
```

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](#).

4.12.4 Deleting a Task in the Task Center

Function

This API is used to delete a task in the task center.

Calling Method

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

URI

DELETE /v2/{project_id}/tasks/{task_id}

Table 4-510 Path Parameters

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

Request Parameters

Table 4-511 Request body parameters

Parameter	Mandatory	Type	Description
message	No	String	Deletion result.

Response Parameters

Status code: 200

Background task deleted successfully.

Status code: 400

Table 4-512 Response body parameters

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

Status code: 401

Table 4-513 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.

Parameter	Type	Description
error_code	String	Error code.
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Status code: 403**Table 4-514** Response body parameters

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

Status code: 404**Table 4-515** Response body parameters

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

Status code: 500**Table 4-516** Response body parameters

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

Example Requests

DELETE https://{dcs_endpoint}/v2/{project_id}/tasks/{task_id}

Example Responses

None

Status Codes

Status Code	Description
200	Background task deleted 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](#).

4.13 Instance Diagnosis

4.13.1 Listing Instance Diagnosis Tasks

Function

This API is used to query the list of diagnosis tasks of a specific DCS instance.

Calling Method

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

URI

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

Table 4-517 Path Parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.

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

Table 4-518 Query Parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records displayed on each page. The minimum value is 1 . The maximum value is 1000 . If this parameter is not specified, 10 records are displayed on each page by default.
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 4-519 Response body parameters

Parameter	Type	Description
diagnosis_report_list	Array of DiagnosisReportInfo objects	Diagnosis reports.
total_num	Integer	Total number of diagnosis reports.

Table 4-520 DiagnosisReportInfo

Parameter	Type	Description
report_id	String	Diagnosis report ID.
status	String	Diagnosis task statuses: diagnosing and finished .

Parameter	Type	Description
begin_time	String	Start time of a diagnosis period. The format is 2017-03-31T12:24:46.297Z .
end_time	String	End time of a diagnosis period. The format is 2017-03-31T12:24:46.297Z .
created_at	String	Time when the diagnosis report is created.
node_num	Integer	Number of diagnosed nodes.
abnormal_item_sum	Integer	Total number of abnormal diagnosis items.
failed_item_sum	Integer	Total number of failed diagnosis items.

Status code: 400

Table 4-521 Response body parameters

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

Status code: 500

Table 4-522 Response body parameters

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

Example Requests

None

Example Responses

Status code: 200

Instance diagnosis reports listed successfully.

```
{
  "diagnosis_report_list" : [ {
    "report_id" : "fb98e37a-3cd9-4c7a-96b1-d878266019e2",
    "status" : "finished",
    "begin_time" : "2021-04-15T06:02:00.000Z",
    "end_time" : "2021-04-15T06:12:00.000Z",
    "created_at" : "2021-04-15T06:12:06.641Z",
    "abnormal_item_sum" : 2,
    "failed_item_sum" : 0,
    "node_num" : 2
  } ],
  "total_num" : 1
}
```

Status Codes

Status Code	Description
200	Instance diagnosis reports listed successfully.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.13.2 Querying a Specified Diagnosis Report

Function

This API is used to query details about a diagnosis report based on the report ID.

Calling Method

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

URI

GET /v2/{project_id}/diagnosis/{report_id}

Table 4-523 Path Parameters

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

Parameter	Mandatory	Type	Description
report_id	Yes	String	Diagnosis report ID.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-524 Response body parameters

Parameter	Type	Description
abnormal_item_sum	Integer	Total number of abnormal diagnosis items.
failed_item_sum	Integer	Total number of failed diagnosis items.
diagnosis_node_report_list	Array of DiagnosisNodeReport objects	Node diagnosis report list.

Table 4-525 DiagnosisNodeReport

Parameter	Type	Description
node_ip	String	Node IP address, for example, 192.168.0.234:6379.
az_code	String	Code of the AZ where the node is.
group_name	String	Name of the shard where the node is.
abnormal_sum	Integer	Total number of abnormal diagnosis items.
failed_sum	Integer	Total number of failed diagnosis items.
role	String	Node roles: master and slave .
diagnosis_dimension_list	Array of DiagnosisDimension objects	Diagnosis dimension list.
command_time_taken_list	CommandTimeTakenList object	Command execution duration list.

Table 4-526 DiagnosisDimension

Parameter	Type	Description
name	String	Diagnosis dimension name.
abnormal_num	Integer	Total number of abnormal diagnosis items.
failed_num	Integer	Total number of failed diagnosis items.
diagnosis_item_list	Array of DiagnosisItem objects	Diagnosis items.

Table 4-527 DiagnosisItem

Parameter	Type	Description
name	String	Diagnosis item name.
cause_ids	Array of ConclusionItem objects	List of cause IDs. For details about the IDs, see Instance Diagnosis IDs .
impact_ids	Array of ConclusionItem objects	List of impact IDs. For details about the IDs, see Instance Diagnosis IDs .
advice_ids	Array of ConclusionItem objects	List of suggestion IDs. For details about the IDs, see Instance Diagnosis IDs .
result	String	Diagnosis result.

Table 4-528 ConclusionItem

Parameter	Type	Description
id	Integer	Conclusion ID.
params	Map<String,String>	Conclusion parameters.

Table 4-529 CommandTimeTakenList

Parameter	Type	Description
total_num	Integer	Total number of times that commands are executed.

Parameter	Type	Description
total_usec_sum	Double	Total duration of command execution.
result	String	Command execution latency result.
command_list	Array of CommandTimeTaken objects	Command execution latency statistics.

Table 4-530 CommandTimeTaken

Parameter	Type	Description
calls_sum	Integer	Number of calls.
usec_sum	Double	Total time consumed.
command_name	String	Command name.
per_usec	String	Duration percentage.
average_usec	Double	Average duration of calls.

Status code: 400**Table 4-531** Response body parameters

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

Status code: 500**Table 4-532** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null .

Example Requests

None

Example Responses

Status code: 200

The specified report is queried successfully.

```
{
  "abnormal_item_sum" : 1,
  "failed_item_sum" : 0,
  "diagnosis_node_report_list" : [ {
    "group_name" : "group-0",
    "az_code" : "region01",
    "node_ip" : "192.168.0.170:6379",
    "abnormal_sum" : 1,
    "failed_sum" : 0,
    "role" : "master",
    "command_time_taken_list" : {
      "command_list" : [ {
        "calls_sum" : 329,
        "usec_sum" : 20.732,
        "command_name" : "info",
        "per_usec" : "68.61%",
        "average_usec" : 0.063
      }, {
        "calls_sum" : 1788,
        "usec_sum" : 1.787,
        "command_name" : "ping",
        "per_usec" : "5.91%",
        "average_usec" : 0.001
      }, {
        "calls_sum" : 2,
        "usec_sum" : 0.025,
        "command_name" : "config",
        "per_usec" : "0.08%",
        "average_usec" : 0.013
      }, {
        "calls_sum" : 60,
        "usec_sum" : 0.186,
        "command_name" : "slowlog",
        "per_usec" : "0.62%",
        "average_usec" : 0.003
      }, {
        "calls_sum" : 1764,
        "usec_sum" : 7.485,
        "command_name" : "publish",
        "per_usec" : "24.77%",
        "average_usec" : 0.004
      }
    ],
    "result" : "succeed",
    "error_code" : null,
    "total_num" : 5,
    "total_usec_sum" : 30.215
  }
],
}
```

```
"diagnosis_dimension_list" : [ {
  "name" : "load",
  "abnormal_num" : 0,
  "failed_num" : 0,
  "diagnosis_item_list" : [ {
    "name" : "cpu_usage",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  }, {
    "name" : "time_consuming_commands",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  } ]
}, {
  "name" : "storage",
  "abnormal_num" : 1,
  "failed_num" : 0,
  "diagnosis_item_list" : [ {
    "name" : "inner_memory_fragmentation",
    "result" : "normal",
    "cause_ids" : [ {
      "id" : 7,
      "params" : null
    } ],
    "impact_ids" : [ {
      "id" : 3,
      "params" : null
    } ],
    "advice_ids" : [ {
      "id" : 4,
      "params" : null
    } ],
    "error_code" : null
  }, {
    "name" : "persistence",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  }, {
    "name" : "centralized_expiration",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  }, {
    "name" : "memory_usage",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  }, {
    "name" : "hit_ratio",
    "result" : "normal",
    "cause_ids" : null,
    "impact_ids" : null,
    "advice_ids" : null,
    "error_code" : null
  } ]
}, {
```

```
"name" : "network",
"abnormal_num" : 0,
"failed_num" : 0,
"diagnosis_item_list" : [ {
  "name" : "connection_num",
  "result" : "normal",
  "cause_ids" : null,
  "impact_ids" : null,
  "advice_ids" : null,
  "error_code" : null
}, {
  "name" : "rx_controlled",
  "result" : "normal",
  "cause_ids" : null,
  "impact_ids" : null,
  "advice_ids" : null,
  "error_code" : null
} ]
} ]
}
```

Status Codes

Status Code	Description
200	The specified report is queried successfully.
400	Invalid request.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.14 Template Management

4.14.1 Viewing Parameter Templates

Function

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

Calling Method

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

URI

GET /v2/{project_id}/config-templates

Table 4-533 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-534 Query Parameters

Parameter	Mandatory	Type	Description
name	No	String	Parameter description: Parameter template name. Fuzzy search is supported. Constraints: N/A. Value range: N/A. Default value: N/A.
type	Yes	String	Parameter description: Template type. Constraints: N/A. Value range: • sys: default template • user: custom template Default value: N/A.

Parameter	Mandatory	Type	Description
engine	No	String	Parameter description: Cache engine. Constraints: N/A. Value range: Redis Default value: N/A.
engine_version	No	String	Parameter description: Cache version. Constraints: N/A Value range: If the cache engine is Redis, the version can be 4.0/5.0/6.0/7.0. Default value: N/A
cache_mode	No	String	Parameter description: DCS instance type. Constraints: N/A. Value range: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting Default value: N/A.

Parameter	Mandatory	Type	Description
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A. Value range: ≥ 0 Default value: 0
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–1,000 Default value: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 4-535 Response body parameters

Parameter	Type	Description
template_num	Integer	Parameter description: Number of templates. Value range: N/A.
templates	Array of ConfigTemplatesListInfo objects	Parameter description: Template details array. Value range: N/A.

Table 4-536 ConfigTemplatesListInfo

Parameter	Type	Description
template_id	String	Parameter description: Template ID. Value range: N/A.
cache_mode	String	Parameter description: DCS instance type. Value range: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting
description	String	Parameter description: Template description. Value range: N/A.
engine	String	Parameter description: Cache engine. Value range: Redis
engine_version	String	Parameter description: Cache version. Value range: If the cache engine is Redis, the version can be 4.0/5.0/6.0/7.0.
name	String	Parameter description: Template name. Value range: N/A.
product_type	String	Parameter description: Edition. Value range: Only the basic edition is supported. Value: generic .

Parameter	Type	Description
storage_type	String	Parameter description: Storage type. Value range: • DRAM • SSD
type	String	Parameter description: Template type. Value range: • sys: default template • user: custom template
created_at	String	Parameter description: Time when the template is created. This parameter is valid only in custom parameter templates. The format is 2023-05-10T11:09:35.802Z. Value range: N/A.

Status code: 400**Table 4-537** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401**Table 4-538** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-539** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404**Table 4-540** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-541** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/config-templates?  
type=sys&engine=Redis&engine_version=5.0&cache_mode=ha&offset=0&limit=10
```

Example Responses

Status code: 200

Parameter templates listed.

```
{  
  "template_num" : 1,  
  "templates" : [ {  
    "template_id" : "6",  
    "cache_mode" : "single",  
    "description" : null,  
    "engine" : "Redis",  
    "engine_version" : "4.0",  
    "name" : "Default-Redis-4.0-single-generic-DRAM",  
    "product_type" : "generic",  
    "storage_type" : "DRAM",  
    "type" : "sys"  
  } ]  
}
```

Status code: 400

Invalid request.

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

Status Codes

Status Code	Description
200	Parameter templates listed.
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](#).

4.14.2 Creating a Custom Template

Function

This API is used to create a custom template.

Calling Method

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

URI

POST /v2/{project_id}/config-templates

Table 4-542 Path Parameters

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

Request Parameters

Table 4-543 Request body parameters

Parameter	Mandatory	Type	Description
template_id	Yes	String	Default template ID.
name	Yes	String	Template name.
type	Yes	String	Template type. Options: • sys: default template • user: custom template
engine	No	String	Cache engine: Redis.
cache_mode	No	String	DCS instance type. The value range is as follows: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting
description	No	String	Template description.

Parameter	Mandatory	Type	Description
engine_version	No	String	Cache version. If the cache engine is Redis, the version can be 4.0/5.0/6.0/7.0.
params	Yes	Map<String,String>	Parameter configuration.

Response Parameters

Status code: 200

Table 4-544 Response body parameters

Parameter	Type	Description
id	String	Template ID.

Status code: 400

Table 4-545 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 401

Table 4-546 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 403**Table 4-547** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 404

Table 4-548 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-549** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

Creating a single-node, Redis 5.0 custom template

POST https://{dcs_endpoint}/v2/{project_id}/config-templates

```
{
  "name" : "Test",
  "cache_mode" : "single",
  "description" : "Test",
  "engine" : "Redis",
  "engine_version" : "5.0",
  "params" : {
    "latency-monitor-threshold" : 15
  },
  "template_id" : "11",
  "type" : "sys"
}
```

Example Responses

Status code: 200

The custom template is created successfully.

```
{
  "id" : "efb1ba06-d3cd-4a77-9173-16f70f2d1343"
}
```

Status code: 400

Invalid request.

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

Status Codes

Status Code	Description
200	The custom template is created 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](#).

4.15 Other APIs

4.15.1 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.

Calling Method

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

URI

GET /v2/{project_id}/flavors

Table 4-550 Path Parameters

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

Table 4-551 Query Parameters

Parameter	Mandatory	Type	Description
spec_code	No	String	Product flavor.
cache_mode	No	String	DCS instance type. Options: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting
engine	No	String	Cache engine. Options: • Redis • Memcached

Parameter	Mandatory	Type	Description
engine_version	No	String	Cache engine version. If the cache engine is Redis, the options are as follows: • 4.0 • 5.0 • 7.0
cpu_type	No	String	CPU architecture. The options are as follows: • x86_64: x86 architecture • aarch64: Arm architecture
capacity	No	String	Cache capacity (GB). • For a single-node or master/standby DCS Redis 4.0/5.0/6.0/7.0 instance, the value can be 0.125, 0.25, 0.5, 1, 2, 4, 8, 16, 24, 32, 48, or 64. For a cluster DCS Redis 4.0 or later instance, the value can be 4, 8, 16, 24, 32, 48, 64, 96, 128, 192, 256, 384, 512, 768, or 1024. For a read/write splitting DCS Redis 4.0/5.0 instance, the value can be 8, 16, 32, or 64. • For a single-node or master/standby DCS Memcached instance, the value can be 2, 4, 8, 16, 32, or 64.
spec_type	No	String	Product flavor type: instance : instance flavor node : node flavor

Request Parameters

None

Response Parameters

Status code: 200

Table 4-552 Response body parameters

Parameter	Type	Description
flavors	Array of FlavorsItems objects	Product flavor details.
billing_factor	String	Billing mode. This parameter is an internal parameter of the service and does not need to be concerned.
spec_type	String	Product flavor type: instance : instance flavor node : node flavor

Table 4-553 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: • single: single-node • ha: master/standby • cluster: Redis Cluster • proxy: Proxy Cluster • ha_rw_split: read/write splitting
engine	String	Cache engine.
engine_version	String	Cache engine version. If the cache engine is Redis, the value can be 4.0 , 5.0 , or 6.0 .
product_type	String	Edition of DCS for Redis. Value: generic : basic edition
cpu_type	String	CPU architecture. The options are as follows: • x86_64: x86 architecture • aarch64: Arm architecture

Parameter	Type	Description
storage_type	String	Storage type. Currently, only the following value is supported: DRAM : in-memory storage
capacity	Array of strings	Cache capacity (GB).
billing_mode	Array of strings	Billing mode. The value can be: • Hourly: pay-per-use
tenant_ip_count	Integer	Number of tenant IP addresses.
pricing_type	String	Pricing type. The options are as follows: • tier: Tiered pricing. One flavor corresponds to multiple capacity options. • normal: One flavor corresponds to one capacity option.
is_dec	Boolean	Whether Dedicated Cloud (DeC) is supported.
dec	Boolean	Whether to support Redis 3.0 Dedicated Cloud (DeC).
attrs	Array of AttrObject objects	Other information about the flavor.
flavors_available_zones	Array of FlavorAzObject objects	AZs where there are available resources.
replica_count	Integer	Replicas.
inquiry_spec_code	String	Product flavor code. This parameter is an internal parameter of the service and does not need to be concerned.
billing_factor	String	Billing mode. This parameter is an internal parameter of the service and does not need to be concerned.

Table 4-554 AttrObject

Parameter	Type	Description
capacity	String	Cache capacity (GB).

Parameter	Type	Description
name	String	Additional information items. The options are as follows: • sharding_num: Number of shards supported by the flavor. • proxy_num: 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 0. • db_number: Number of DBs of the flavor. • max_memory: Maximum available memory. • max_connections: Maximum number of connections supported by the flavor. • max_clients: Maximum number of clients supported by the flavor, which is usually equal to the maximum number of connections. • max_bandwidth: Maximum bandwidth supported by the flavor. • max_in_bandwidth: Maximum inbound bandwidth supported by the flavor, which is usually equal to the maximum bandwidth.
value	String	Additional information value.

Table 4-555 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 4-556 Response body parameters

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

Status code: 401**Table 4-557** Response body parameters

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

Status code: 403**Table 4-558** Response body parameters

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

Status code: 404**Table 4-559** Response body parameters

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

Parameter	Type	Description
error_ext_msg	String	Extended error information. This parameter is not used currently and is set to null.

Status code: 500

Table 4-560 Response body parameters

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

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}&spec_type={spec_type}
```

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,
"inquiry_spec_code": "redis.single.au1.large.1",
"billing_factor": "Duration"
} ]
}
```

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](#).

4.15.2 Listing Maintenance Time Windows

Function

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

Calling Method

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

URI

GET /v2/instances/maintain-windows

Request Parameters

None

Response Parameters

Status code: 200

Table 4-561 Response body parameters

Parameter	Type	Description
maintain_windows	Array of MaintainWindowsEntity objects	Parameter description: List of supported maintenance time windows. Value range: N/A.

Table 4-562 MaintainWindowsEntity

Parameter	Type	Description
seq	Integer	Parameter description: Sequence number. Value range: N/A.
default	Boolean	Parameter description: Whether a maintenance time window is set to the default time segment. Value range: • true • false
begin	String	Parameter description: UTC time when the maintenance time window starts. The format is HH:mm:ss. Value range: N/A.
end	String	Parameter description: UTC time when the maintenance time window ends. The format is HH:mm:ss. Value range: N/A.

Status code: 500

Table 4-563 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

GET 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](#).

4.15.3 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.

Calling Method

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

URI

GET /v2/{project_id}/quota

Table 4-564 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200**Table 4-565** Response body parameters

Parameter	Type	Description
quotas	quotas object	Parameter description: Quota information. Value range: N/A.

Table 4-566 quotas

Parameter	Type	Description
resources	Array of Resources objects	Parameter description: Quota list. Value range: N/A.

Table 4-567 Resources

Parameter	Type	Description
unit	String	Parameter description: Resource unit. - When type is set to instance, no value is returned. - When type is set to ram, GB is returned. Value range: N/A.
min	Integer	Parameter description: - Minimum limit of instance quota when type is set to instance. - Minimum limit of memory quota when type is set to ram. Value range: N/A.
max	Integer	Parameter description: - Maximum limit of instance quota when type is set to instance. - Maximum limit of memory quota when type is set to ram. Value range: N/A.
quota	Integer	Parameter description: Maximum number of instances that can be created and maximum allowed total memory. Value range: N/A.
used	Integer	Parameter description: Number of created instances and used memory. Value range: N/A.
type	String	Parameter description: Quota type. Value range: instances: instance quota ram: memory quota

Status code: 400**Table 4-568** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Status code: 500**Table 4-569** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .

Parameter	Type	Description
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

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](#).

4.15.4 Listing Monitored Objects on Secondary Dimensions Under a Primary Dimension

Function

This API is used to query the monitored objects on secondary dimensions under primary dimension `dcs_instance_id`.

Calling Method

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

URI

GET /v2/{project_id}/dims/monitored-objects/{instance_id}

Table 4-570 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.
instance_id	Yes	String	Parameter description: ID of the monitored object on the primary dimension, which is the instance ID. Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-571 Query Parameters

Parameter	Mandatory	Type	Description
dim_name	Yes	String	Parameter description: ID of the primary dimension, which can be dc_instance_id . Constraints: N/A. Value range: N/A. Default value: N/A.

Request Parameters

None

Response Parameters

Status code: 200

Table 4-572 Response body parameters

Parameter	Type	Description
router	Array of strings	Parameter description: Route of the specified dimension. If the dimension is the primary dimension, the array contains its ID. Value range: N/A.
children	Array of DimChild objects	Parameter description: Secondary dimensions under the specified dimension. This parameter is valid only when the dimension is dc_instance_id . Value range: - The secondary dimension of a Proxy Cluster instance can be dc_cluster_redis_node or dc_cluster_proxy_node. - The secondary dimension of a Redis Cluster instance can be dc_cluster_proxy_node.

Parameter	Type	Description
instances	Array of InstancesMonitoredObject objects	Parameter description: Monitored objects of the specified dimension. Value range: N/A.
dcs_cluster_redis_node	Array of ClusterRedisNodeMonitoredObject objects	Parameter description: Monitored objects of the Redis Server. This parameter is valid for Proxy Cluster and Redis Cluster instances. The field name is the same as the secondary dimension object name under children. Value range: N/A.
dcs_cluster_proxy_node	Array of ProxyNodeMonitoredObject objects	Parameter description: This parameter is not used. Value range: N/A.
dcs_cluster_proxy2_node	Array of Proxy2NodeMonitoredObject objects	Parameter description: Monitored objects of the Proxy. This parameter is valid only for Proxy Cluster DCS Redis 4.0 and 5.0 instances. The field name is the same as the secondary dimension object name under children. Value range: N/A.
total	Integer	Parameter description: Total number of monitored objects on the primary dimension. Value range: N/A.

Table 4-573 DimChild

Parameter	Type	Description
dim_name	String	Parameter description: Dimension name. Value range: • dcs_instance_id • dcs_cluster_redis_node • dcs_cluster_proxy_node
dim_route	String	Parameter description: Dimension route. Format: <i>Primary dimension name,Secondary dimension name</i> . For example, if dim_name is dcs_cluster_redis_node , the value of this field is dcs_instance_id,dcs_cluster_redis_node . Value range: N/A.

Table 4-574 InstancesMonitoredObject

Parameter	Type	Description
dcs_instance_id	String	Parameter description: ID of the monitored object, which is the instance ID. Value range: N/A.
name	String	Parameter description: Name of the monitored object, which is the instance name. Value range: N/A.
status	String	Parameter description: Status of the monitored object, which is the instance status. Value range: N/A.

Table 4-575 ClusterRedisNodeMonitoredObject

Parameter	Type	Description
dc_instance_id	String	Parameter description: ID of the monitored object, which is the node ID. Value range: N/A.
name	String	Parameter description: Name of the monitored object, which is the node IP address. Value range: N/A.
dc_cluster_redis_node	String	Parameter description: ID of the monitored object on the dc_cluster_redis_node dimension. Value range: N/A.
status	String	Parameter description: Status of the monitored object, which is the node status. Value range: N/A.

Table 4-576 ProxyNodeMonitoredObject

Parameter	Type	Description
dc_instance_id	String	Parameter description: ID of the monitored object, which is the node ID. Value range: N/A.
name	String	Parameter description: Name of the monitored object, which is the node IP address. Value range: N/A.

Parameter	Type	Description
dcsc_cluster_proxy_node	String	Parameter description: ID of the monitored object on the dcsc_cluster_proxy_node dimension. Value range: N/A.
status	String	Parameter description: Status of the monitored object, which is the node status. Value range: N/A.

Table 4-577 Proxy2NodeMonitoredObject

Parameter	Type	Description
dcsc_instance_id	String	Parameter description: ID of the monitored object, which is the node ID. Value range: N/A.
name	String	Parameter description: Name of the monitored object, which is the node IP address. Value range: N/A.
dcsc_cluster_proxy2_node	String	Parameter description: ID of the monitored object on the dcsc_cluster_proxy2_node dimension. Value range: N/A.
status	String	Parameter description: Status of the monitored object, which is the node status. Value range: N/A.

Status code: 500

Table 4-578 Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/dims/monitored-objects/{instance_id}?dim_name={dim_name}
```

Example Responses

Status code: 200

Successfully queried the monitored objects on the primary dimension.

```
{
  "router": [ "dcs_instance_id" ],
  "total": 1,
  "children": [ {
    "dim_name": "dcs_cluster_redis_node",
    "dim_route": "dcs_instance_id,dcs_cluster_redis_node"
  } ],
  "instances": [ {
    "name": "dcs-test001",
    "status": "RUNNING",
    "dcs_instance_id": "03ca9da0-1104-40a5-b49d-5ef8e41bfd19"
  } ],
  "dcs_cluster_redis_node": [ {
    "name": "(master)192.168.2.145",
    "status": "RUNNING",
    "dcs_instance_id": "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
    "dcs_cluster_redis_node": "b1f4aa9e4dae50888e58c9caecdfc108"
  }, {
    "name": "(replica)192.168.2.199",
    "status": "RUNNING",
    "dcs_instance_id": "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
    "dcs_cluster_redis_node": "e0e10e489a73487147928167396474bc"
  }, {
    "name": "(master)192.168.2.243",
    "status": "RUNNING",
    "dcs_instance_id": "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
  } ]
}
```

```
"dcs_cluster_redis_node" : "e797c3ba8bee782e25cdd4a90eb00517"
}, {
  "name" : "(replica)192.168.2.164",
  "status" : "RUNNING",
  "dcs_instance_id" : "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
  "dcs_cluster_redis_node" : "d810fb44f9f7a359e000cf277a824c43"
}, {
  "name" : "(master)192.168.2.95",
  "status" : "RUNNING",
  "dcs_instance_id" : "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
  "dcs_cluster_redis_node" : "f25c37a4654d50b07e629fc2adfbfa60f"
}, {
  "name" : "(replica)192.168.2.51",
  "status" : "RUNNING",
  "dcs_instance_id" : "03ca9da0-1104-40a5-b49d-5ef8e41bfd19",
  "dcs_cluster_redis_node" : "da5149a20dc7caf35587e4d2433fe452"
}]
}
```

Status Codes

Status Code	Description
200	Successfully queried the monitored objects on the primary dimension.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.15.5 Listing Monitored Objects on Primary Dimensions

Function

This API is used to query the monitored objects on the primary dimension **dcs_instance_id** or **dcs_memcached_instance_id**.

Calling Method

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

URI

GET /v2/{project_id}/dms/monitored-objects

Table 4-579 Path Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Parameter description: Project ID. For details, see Obtaining a Project ID . Constraints: N/A. Value range: N/A. Default value: N/A.

Table 4-580 Query Parameters

Parameter	Mandatory	Type	Description
dim_name	Yes	String	Parameter description: Primary dimension ID. Constraints: N/A. Value range: It can be <code>dcs_instance_id</code> . Default value: N/A.
offset	No	Integer	Parameter description: Offset, which is the position where the query starts. Constraints: N/A. Value range: ≥ 0 Default value: 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Parameter description: Number of records displayed on each page. Constraints: N/A. Value range: 1–1,000 Default value: 10

Request Parameters

None

Response Parameters

Status code: 200

Table 4-581 Response body parameters

Parameter	Type	Description
router	Array of strings	Parameter description: Route of the specified dimension. If the dimension is the primary dimension, the array contains its ID. Value range: N/A.
children	Array of DimChild objects	Parameter description: Secondary dimensions under the specified dimension. This parameter is valid only when the dimension is dc_instance_id . Value range: - The secondary dimension of a Proxy Cluster instance can be dc_cluster_redis_node or dc_cluster_proxy_node. - The secondary dimension of a Redis Cluster instance can be dc_cluster_proxy_node.

Parameter	Type	Description
instances	Array of InstancesMonitoredObject objects	Parameter description: Monitored objects of the specified dimension. Value range: N/A.
total	Integer	Parameter description: Total number of monitored objects on the primary dimension. Value range: N/A.

Table 4-582 DimChild

Parameter	Type	Description
dim_name	String	Parameter description: Dimension name. Value range: • dcs_instance_id • dcs_cluster_redis_node • dcs_cluster_proxy_node
dim_route	String	Parameter description: Dimension route. Format: <i>Primary dimension name,Secondary dimension name</i> . For example, if dim_name is dcs_cluster_redis_node , the value of this field is dcs_instance_id,dcs_cluster_redis_node . Value range: N/A.

Table 4-583 InstancesMonitoredObject

Parameter	Type	Description
dcs_instance_id	String	Parameter description: ID of the monitored object, which is the instance ID. Value range: N/A.
name	String	Parameter description: Name of the monitored object, which is the instance name. Value range: N/A.
status	String	Parameter description: Status of the monitored object, which is the instance status. Value range: N/A.

Status code: 500**Table 4-584** Response body parameters

Parameter	Type	Description
error_msg	String	Parameter description: Error message. Value range: N/A.
error_code	String	Parameter description: Error code. Value range: For details, see Error Codes .
error_ext_msg	String	Parameter description: Extended error information. This parameter is not used currently and is set to null . Value range: N/A.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/dims/monitored-objects?dim_name={dim_name}
```

Example Responses

Status code: 200

Successfully listed the monitored objects on the primary dimension.

```
{
  "router" : [ "dcs_instance_id" ],
  "total" : 3,
  "children" : [ {
    "dim_name" : "dcs_cluster_redis_node",
    "dim_route" : "dcs_instance_id,dcs_cluster_redis_node"
  }, {
    "dim_name" : "dcs_cluster_proxy_node",
    "dim_route" : "dcs_instance_id,dcs_cluster_proxy_node"
  } ],
  "instances" : [ {
    "name" : "dcs-redis-single-node",
    "status" : "RUNNING",
    "dcs_instance_id" : "fe909c47-8990-44a0-9154-d0a1e95e78fe"
  }, {
    "name" : "dcs-redis-master-standby",
    "status" : "RUNNING",
    "dcs_instance_id" : "877e5ae3-482e-4c38-88a0-030a0fa6f399"
  }, {
    "name" : "dcs-proxy-cluster",
    "status" : "RUNNING",
    "dcs_instance_id" : "448ee851-1366-47f2-913a-e21032e690c4"
  } ]
}
```

Status Codes

Status Code	Description
200	Successfully listed the monitored objects on the primary dimension.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.15.6 Querying AZs

Function

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

Calling Method

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

URI

GET /v2/available-zones

Request Parameters

None

Response Parameters

Status code: 200

Table 4-585 Response body parameters

Parameter	Type	Description
region_id	String	Parameter description: Region ID. Value range: N/A.
available_zones	Array of AvailableZones objects	Parameter description: Array of AZs. Value range: N/A.

Table 4-586 AvailableZones

Parameter	Type	Description
code	String	Parameter description: AZ code. Value range: N/A.
port	String	Parameter description: AZ port. Value range: N/A.
name	String	Parameter description: AZ name Value range: N/A.

Parameter	Type	Description
id	String	Parameter description: AZ ID. Value range: N/A.
resource_availability	String	Parameter description: Whether the AZ has available resources. Value range: • true: There are available resources in the AZ. • false: No resource is available.

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](#).

4.16 Session Management

4.16.1 Querying Sessions

Function

This API is used to query sessions.

Calling Method

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

URI

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

Table 4-587 Path Parameters

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

Request Parameters

Table 4-588 Request body parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Node ID.
clean_cache	No	Boolean	Indicates whether to re-query and save the session list.

Response Parameters

Status code: 200

Successful

Status code: 400

Table 4-589 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 401

Table 4-590 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 403

Table 4-591 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 404

Table 4-592 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 500

Table 4-593 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Example Requests

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/clients
{
  "node_id" : "8f7ee181-88e2-49b7-a4bf-81f18f93a135",
  "clean_cache" : true
}
```

Example Responses

Status code: 200

Successful

```
{
  "job_id" : "8abf6e1e824e204401824e3e621b0042"
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4957",
  "error_msg" : "This operation is not allowed when the task is in the current state."
}
```

Status Codes

Status Code	Description
200	Successful
400	Invalid request.
401	Invalid authentication information.
403	Access denied.
404	The requested resource could not be found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.16.2 Obtaining Session List

Function

This API is used to obtain the session list.

Calling Method

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

URI

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

Table 4-594 Path Parameters

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

Table 4-595 Query Parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Node ID. For a read/write splitting or Proxy Cluster instance, use the node_id of a proxy. For a single-node, master/standby, or Redis Cluster instance, use the node_id of a data node.
offset	No	Integer	Offset, which is the position where the query starts. The value must be greater than or equal to 0. The default value is 0 .
limit	No	Integer	Number of records displayed on each page. The minimum value is 1 . The maximum value is 1000* . The default value is 10 .
addr	No	String	Filter by client connection addresses.

Parameter	Mandatory	Type	Description
sort	No	String	Sorting field, which specifies a value in the ClientInfo for sorting sessions.
order	No	String	Sorting mode. The options are asc (ascending order) and desc (descending order).

Request Parameters

None

Response Parameters

Status code: 200

Table 4-596 Response body parameters

Parameter	Type	Description
time	String	Data update time.
clients	Array of ClientInfo objects	Session list.
count	Integer	Total number of sessions.

Table 4-597 ClientInfo

Parameter	Type	Description
id	String	Client ID.
addr	String	IP address and port of the client.
fd	String	File descriptor used in containers.
name	String	Client name.
cmd	String	Last executed command.
age	Integer	Connection duration (s).
idle	Integer	Idle duration (s).
db	String	ID of the database used by the client.
flags	String	Client flag. By default, this parameter is not set and the value is N .
sub	Integer	Number of subscribed channels.

Parameter	Type	Description
psub	Integer	Number of subscribed modes.
multi	Integer	Number of commands executed in a transaction.
qbuf	Integer	Querying buffer length, in bytes. 0 : There is no buffer.
qbuf_free	Integer	Querying length of the remaining buffer, in bytes. 0 : There is no remaining buffer.
obl	Integer	Length of output buffer, in bytes. 0 : No output buffer is allocated.
oll	Integer	Number of objects contained in the output list (When the length of the remaining buffer is 0 , responses to user commands are enqueued as a string object.)
omem	Integer	Total memory occupied by the output buffer and the output list.
events	String	File operations. r indicates read and w indicates write.
network	String	Type of the network used by the client.
peer	String	IP address and port of the client.
user	String	Client user.

Status code: 400**Table 4-598** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 401

Table 4-599 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 403**Table 4-600** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 404**Table 4-601** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 500**Table 4-602** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Example Requests

```
GET https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/clients?node_id=8f7ee181-88e2-49b7-a4bf-81f18f93a135
```


Example Responses

Status code: 200

Successful.

```
{
  "time": "2023-06-15T03:10:01.332Z",
  "clients": [ {
    "id": "11677",
    "addr": "198.19.131.14:1637",
    "name": "dcs",
    "cmd": "info",
    "age": 376,
    "idle": 376,
    "flags": "N",
    "fd": "16",
    "db": "0",
    "sub": 0,
    "psub": 0,
    "multi": 1,
    "qbuf": 0,
    "qbuf_free": 4,
    "obl": 0,
    "oll": 0,
    "omem": 0,
    "events": "r",
    "network": "vpc",
    "peer": "198.198.0.121:4058",
    "user": "dcs"
  } ],
  "count": 1
}
```

Status code: 400

Invalid request.

```
{
  "error_code": "DCS.4957",
  "error_msg": "This operation is not allowed when the task is in the current state."
}
```

Status Codes

Status Code	Description
200	Successful.
400	Invalid request.
401	Invalid authentication information.
403	Access denied.
404	The requested resource could not be found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.16.3 Killing Specified Sessions

Function

This API is used to kill specified sessions.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/clients/kill

Table 4-603 Path Parameters

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

Request Parameters

Table 4-604 Request body parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Node ID.
client_addrs	Yes	Array of strings	List of addresses of the sessions to be killed. The value is the address and port of peer in the session information.

Response Parameters

Status code: 204

Successful.

Status code: 400

Table 4-605 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.

Parameter	Type	Description
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 401**Table 4-606** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 403**Table 4-607** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 404**Table 4-608** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 500

Table 4-609 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Example Requests

```
POST https://{dcs_endpoint}/v2/{project_id}/instances/{instance_id}/clients/kill
{
  "node_id" : "8f7ee181-88e2-49b7-a4bf-81f18f93a135",
  "client_addrs" : [ "10.63.238.158:2048", "10.63.238.159:3058" ]
}
```

Example Responses

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4957",
  "error_msg" : "This operation is not allowed when the task is in the current state."
}
```

Status Codes

Status Code	Description
204	Successful.
400	Invalid request.
401	Invalid authentication information.
403	Access denied.
404	The requested resource could not be found.
500	Internal service error.

Error Codes

See [Error Codes](#).

4.16.4 Killing All Sessions of a Specified Node or Instance

Function

This API is used to kill all the sessions of a specified node or instance.

Calling Method

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

URI

POST /v2/{project_id}/instances/{instance_id}/clients/kill-all

Table 4-610 Path Parameters

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

Request Parameters

Table 4-611 Request body parameters

Parameter	Mandatory	Type	Description
node_id	No	String	Node ID of the sessions to be killed. Mandatory when kill_all_nodes is false .
kill_all_nodes	No	Boolean	true : Kill sessions of all nodes of the instance. false : Kill all sessions of specified nodes of the instance.

Response Parameters

Status code: 200

Table 4-612 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task for killing a specified node or instance.

Status code: 400

Table 4-613 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 401**Table 4-614** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 403**Table 4-615** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 404**Table 4-616** Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Status code: 500

Table 4-617 Response body parameters

Parameter	Type	Description
error_msg	String	Error message.
error_code	String	Error code.
error_ext_msg	String	Error message details.

Example Requests

```
{
  "node_id" : "8f7ee181-88e2-49b7-a4bf-81f18f93a135",
  "kill_all_nodes" : true
}
```

Example Responses

Status code: 200

Successful.

```
{
  "job_id" : "8abf6e1e824dfcb201824e02ee9a0015"
}
```

Status code: 400

Invalid request.

```
{
  "error_code" : "DCS.4957",
  "error_msg" : "This operation is not allowed when the task is in the current state."
}
```

Status Codes

Status Code	Description
200	Successful.
400	Invalid request.
401	Invalid authentication information.
403	Access denied.
404	The requested resource could not be found.
500	Internal service error.

Error Codes

See [Error Codes](#).

5 Permissions Policies and Supported Actions

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

By default, new IAM users do not have any permissions assigned. You need to add a user to one or more groups, and assign permissions policies to these groups. The user then inherits permissions from the groups it is a member of. This process is called authorization. After authorization, the user can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using roles and policies. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Policy-based authorization is recommended if you want to allow or deny the access to an API.

An account has all of the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users that have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user 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: APIs that will be called for performing certain operations.

- 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 projects 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. If an action supports only IAM projects, the policy will take effect only for user groups assigned in IAM. Administrators can check whether an action supports IAM projects or enterprise projects in the action list. "√" indicates that the action supports the project and "×" indicates that the action does not support the project.

Table 5-1 lists the API actions supported by DCS.

Table 5-1 DCS actions

Permission	Action	API	IAM Projects	Enterprise Project
Creating a DCS instance	dcs:instance:create	POST /v2/{project_id}/instances	√	√
Querying an instance	dcs:instance:get	GET /v2/{project_id}/instances/{instance_id}	√	√
Modifying the information about an instance	dcs:instance:modify	PUT /v2/{project_id}/instances/{instance_id}	√	√
Deleting an instance	dcs:instance:delete	DELETE /v2/{project_id}/instances/{instance_id}	√	√
Expanding instance capacity	dcs:instance:scale	POST /v2/{project_id}/instances/{instance_id}/resize	√	√
Querying all instances	dcs:instance:list	GET /v2/{project_id}/instances	√	√
Querying instance configuration parameters	dcs:instance:getConfiguration	GET /v2/{project_id}/instances/{instance_id}/configs	√	√
Modifying instance configuration parameters	dcs:instance:modifyConfiguration	PUT /v2/{project_id}/instances/{instance_id}/configs	√	√

Permission	Action	API	IA M Pro ject s	Ent erp ris e Pro jec t
Restarting an instance or clearing instance data	dcs:instance:modifyStatus	PUT /v2/{project_id}/instances/status	√	√
Changing the instance password	dcs:instance:modifyAuthInfo	PUT /v2/{project_id}/instances/{instance_id}/password	√	√
Backing up an instance	dcs:instance:backupData	POST /v2/{project_id}/instances/{instance_id}/backups	√	√
Restoring an instance	dcs:instance:restoreData	POST /v2/{project_id}/instances/{instance_id}/restores	√	√
Querying backup records	dcs:instance:getDataBackupLog	GET /v2/{project_id}/instances/{instance_id}/backups	√	√
Querying restoration records	dcs:instance:getDataRestoreLog	GET /v2/{project_id}/instances/{instance_id}/restores	√	√
Deleting backup files	dcs:instance:deleteDataBackupFile	DELETE /v2/{project_id}/instances/{instance_id}/backups/{backup_id}	√	√
Listing background tasks	dcs:instance:getBackgroundTask	GET /v2/{project_id}/instances/{instance_id}/tasks	√	√
Deleting a background task	dcs:instance:deleteBackgroundTask	DELETE /v2/{project_id}/instances/{instance_id}/tasks/{task_id}	√	√
Resetting the instance password	dcs:instance:resetAuthInfo	POST /v2/{project_id}/instances/{instance_id}/password/reset	√	√
Downloading backup files	dcs:instance:downloadBackupData	POST /v2/{project_id}/instances/{instance_id}/backups/{backup_id}/links	√	√
Migrating data	dcs:instance:migrateData	-	√	√

Permission	Action	API	IA M Pro ject s	Ent erp ris e Pro jec t
Web CLI	dc:instance:webcli	-	√	√
Creating a migration task	dc:migrationTask:create	POST /v2/{project_id}/migration-task	√	X
Modifying migration task configurations or stopping a migration task	dc:migrationTask:modify	POST /v2/{project_id}/migration-task/{task_id}/stop	√	X
Deleting a migration task	dc:migrationTask:delete	DELETE /v2/{project_id}/migration-tasks/delete	√	X
Listing migration tasks	dc:migrationTask:list	GET /v2/{project_id}/migration-tasks	√	X
Querying details of a data migration task	dc:migrationTask:get	GET /v2/{project_id}/migration-task/{task_id}	√	X
Diagnosing an instance	dc:instance:diagnosis	POST /v2/{project_id}/instances/{instance_id}/diagnosis	√	√
Viewing parameter templates	dc:template:list	GET /v2/{project_id}/config-templates	√	X
Creating a parameter template	dc:template:create	POST /v2/{project_id}/config-templates	√	X
Performing a master/standby switchover	dc:instance:swap	POST /v2/{project_id}/instances/{instance_id}/swap	√	√
Modifying the whitelist of an instance	dc:whitelist:modify	PUT /v2/{project_id}/instance/{instance_id}/whitelist	√	√
Obtaining the whitelist of an instance	dc:whitelist:list	GET /v2/{project_id}/instance/{instance_id}/whitelist	√	√

Permission	Action	API	IA M Pro ject s	Ent erp ris e Pro jec t
Creating a user for accessing an instance	dcslaccount:create	POST /v2/{project_id}/instances/{instance_id}/accounts	√	√
Deleting an instance user	dcslaccount:delete	DELETE /v2/{project_id}/instances/{instance_id}/accounts/{account_id}	√	√
Modifying the information about an instance user	dcslaccount:modify	PUT /v2/{project_id}/instances/{instance_id}/accounts/{account_id}	√	√
Obtaining the list of instance users	dcslaccount:list	GET /v2/{project_id}/instances/{instance_id}/accounts	√	√
Querying slow logs	dcslslowlog:list	GET /v2/{project_id}/instances/{instance_id}/slowlog	√	√
Viewing parameter templates	dcsltemplate:get	-	√	X
Viewing the task progress	dcsljob:get	-	√	X
Viewing audit logs	dcslauditlog:get	-	√	√
Querying instance upgrade information	dcslinstance:getUpgradeInfo	-	√	√
Querying SSL encryption of an instance	dcslssl:get	-	√	√
Updating domain names	dcsldomainname:rebuild	-	√	√
Switching IP addresses	dcslmigrationTask:exchangeIp	-	√	X

Permission	Action	API	IA M Pro ject s	Ent erp ris e Pro jec t
Rolling back IP address switching	dc:migrationTask:rollbackIp	-	√	X
Killing Redis sessions	dc:clients:kill	-	√	√
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	-	√	√
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	-	√	√
Querying the Redis session list	dc:clients:list	-	√	√

6 Appendix

6.1 Status Codes

Table 6-1 describes status codes.

Table 6-1 Status codes

Status Code	Name	Description
100	Continue	The server has received the initial part of the request and the client should continue to send the remaining part.
101	Switching Protocols	The requester has asked the server to switch protocols and the server has agreed to do so. The target protocol must be more advanced than the source protocol. For example, the current HTTP protocol is switched to a later version of HTTP.
200	OK	The server successfully processed the request.
201	Created	The request has been fulfilled, resulting in the creation of a new resource.
202	Accepted	The request has been accepted for processing, but the processing has not been completed.
203	Non-Authoritative Information	The request has been fulfilled.
204	NoContent	The server has successfully processed the request, but is not returning any content. The status code is returned in response to an HTTP OPTIONS request.

Status Code	Name	Description
205	Reset Content	The server has successfully processed the request, but is not returning any content. Unlike a 204 response, this response requires that the requester reset the content.
206	Partial Content	The server has successfully processed a part of the GET request.
300	Multiple Choices	There are multiple options for the requested resource. For example, this code could be used to present a list of resource characteristics and addresses from which the client such as a browser may choose.
301	Moved Permanently	This and all future requests 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 another URI 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 provided by the client is incorrect or invalid.
402	Payment Required	Reserved for future use.
403	Forbidden	The server has received the request and understood it, but the server is refusing to respond to it. The client should modify the request instead of re-initiating it.

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 fulfill 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 Timeout	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 could not be processed due to a conflict in the request, such as an edit conflict between multiple simultaneous updates or the resource that the client attempts to create already exists.
410	Gone	The requested resource has been deleted permanently and will not be available again.
411	Length Required	The server refused to process the request because the request does not specify the length of its content.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The 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.

6.2 Error Codes

Status Code	Error Codes	Error Message	Description	Solution
400	DCS.3053	Incorrect node ID.	Incorrect node ID.	Check whether the Node ID is valid.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
400	111400037	The instanceParameters parameter in the request contains invalid characters or is not in JSON format.	The instanceParameters 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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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 be an array that contains only one AZ ID.	The available_zones parameter in the request must be an array that contains only one AZ ID.	Check whether the request parameters are valid.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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"

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

Status Code	Error Codes	Error Message	Description	Solution
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.
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.

6.3 Obtaining a Project ID

You can obtain a project ID [by calling an API](#) or [from the console](#).

Obtaining a Project ID by Calling an API

You can obtain a project ID by calling the API used to [query projects based on specified criteria](#).

The API used to obtain a project ID is **GET `https://{Endpoint}/v3/projects/`**, where *{Endpoint}* indicates the IAM endpoint. You can obtain the IAM endpoint from Regions and Endpoints. For details on API calling authentication, see [Authentication](#).

The following is an example response. The value of **id** in the **projects** section is the project ID.

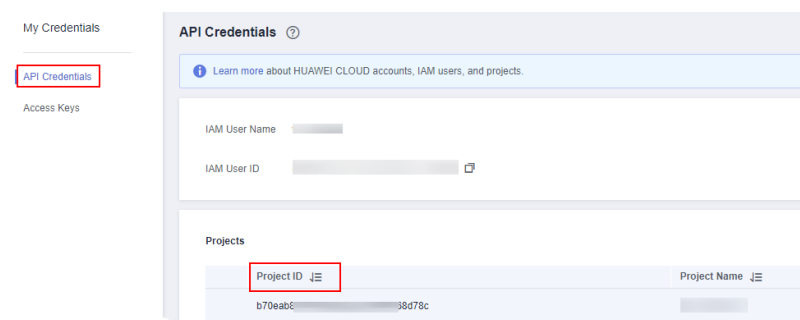
```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "XXXXX",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "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. You can obtain a project ID on the console.

The following procedure describes how to obtain a project ID:

- Step 1** Sign up and log in to the management console.
- Step 2** Click the username in the upper right corner and select **My Credentials** from the drop-down list.
- Step 3** On the **My Credentials** page, view project IDs in the project list.

Figure 6-1 Viewing project IDs

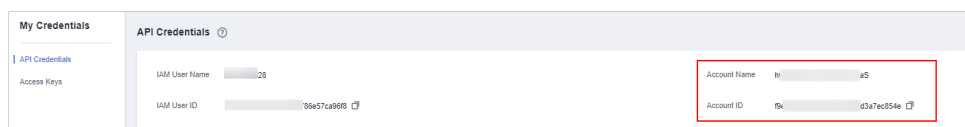
----End

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

On the **API Credentials** page, view the **Account Name** and **Account ID**.

Figure 6-2 Viewing the account name and account ID

6.5 DCS Instance Statuses

Table 6-2 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.
FROZEN	The instance has been frozen due to low balance. You can unfreeze the instance by recharging your account in My Order.

State	Description
EXTENDING	The instance is being scaled up.
RESTORING	The instance data is being restored.
FLUSHING	The DCS instance is being cleared.

6.6 Instance Diagnosis IDs

Table 6-3 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}.
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 6-4 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 6-5 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.
4	advice	Manually run the MEMORY PURGE 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).