

GeminiDB

API Reference

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Contents

1 Before You Start.....	1
1.1 Overview.....	1
1.2 API Calling.....	1
1.3 Endpoints.....	1
1.4 Constraints.....	1
1.5 Concepts.....	1
2 API Overview.....	3
3 Calling APIs.....	5
3.1 Making an API Request.....	5
3.2 Authentication.....	8
3.3 Returned Values.....	9
4 Quick Start.....	11
5 APIs v3 (Recommended).....	13
5.1 API Versions.....	13
5.1.1 Querying API Versions.....	13
5.1.2 Querying Version Information of an API.....	15
5.2 Versions and Specifications.....	17
5.2.1 Querying Version Information.....	17
5.2.2 Querying Instance Specifications.....	19
5.2.3 Querying Dedicated Resources.....	22
5.3 Instances.....	25
5.3.1 Creating an Instance.....	25
5.3.2 Deleting an Instance.....	48
5.3.3 Querying Instances and Details.....	49
5.3.4 Scaling Up Storage Space of an Instance.....	60
5.3.5 Adding Nodes for an Instance.....	62
5.3.6 Deleting Nodes from a Specified Instance.....	65
5.3.7 Obtaining Sessions of a Node.....	68
5.3.8 Querying Session Statistics of an Instance Node.....	71
5.3.9 Closing Sessions of an Instance Node.....	73
5.3.10 Querying Specifications That You Can Change Those of an Instance To.....	75
5.3.11 Changing Specifications of an Instance.....	78

5.3.12 Resetting the Administrator Password of an Instance.....	81
5.3.13 Editing the Name of an Instance.....	83
5.3.14 Changing the Security Group of an Instance.....	85
5.3.15 Upgrading Minor Version.....	87
5.3.16 Creating Cold Storage.....	88
5.3.17 Scaling Up Cold Storage.....	90
5.3.18 Binding/Unbinding an EIP.....	92
5.3.19 Enabling or Disabling SSL.....	95
5.3.20 Restarting an Instance.....	97
5.3.21 Configuring an Autoscaling Policy for Storage Space.....	98
5.3.22 Checking Password Strength.....	103
5.3.23 Changing a Database Port.....	105
5.3.24 Configuring Access to a Replica Set Across CIDR Blocks.....	107
5.3.25 Deleting the Node that Fails to Be Added.....	109
5.3.26 Querying IP Addresses Required for Creating an Instance or Adding Nodes.....	111
5.3.27 Configuring the Autoscaling Policy of Storage Space.....	113
5.3.28 Scaling Storage Space of an Instance.....	116
5.4 Backups and Restorations.....	118
5.4.1 Querying Backups.....	118
5.4.2 Querying Backups (Recommended).....	123
5.4.3 Querying an Automated Backup Policy.....	128
5.4.4 Configuring an Automated Backup Policy.....	130
5.4.5 Querying Instances that Can Be Restored.....	133
5.4.6 Querying the Time Window When a Backup Can Be Restored.....	136
5.4.7 Creating a Manual Backup.....	138
5.4.8 Deleting a Manual Backup.....	140
5.4.9 Restoring Data to an Existing Instance.....	142
5.4.10 Querying the Recycling Policy.....	144
5.4.11 Modifying the Recycling Policy.....	146
5.4.12 Querying Instances in the Recycle Bin.....	147
5.4.13 Obtaining GeminiDB Cassandra Instance Database Information That Is Restored Using Tables....	151
5.4.14 Obtaining GeminiDB Cassandra Instance Table Information That Is Restored Using Tables.....	153
5.5 Parameter Templates.....	155
5.5.1 Obtaining Parameter Templates.....	155
5.5.2 Creating a Parameter Template.....	159
5.5.3 Modifying Parameters in a Parameter Template.....	163
5.5.4 Applying a Parameter Template.....	165
5.5.5 Modifying Parameters of a Specified Instance.....	167
5.5.6 Querying Instance Parameter Settings.....	169
5.5.7 Obtaining Parameters of a Specified Parameter Template.....	172
5.5.8 Deleting a Parameter Template.....	174
5.5.9 Querying Instances that a Parameter Template Can Be Applied To.....	176

5.5.10 Viewing Parameter Change History of an Instance.....	178
5.5.11 Viewing Application Records of a Parameter Template.....	181
5.5.12 Comparing Parameter Templates.....	184
5.5.13 Replicating a Parameter Template.....	186
5.5.14 Querying API that Support Parameter Templates.....	188
5.6 Account Management.....	190
5.6.1 Creating a Database Account.....	190
5.6.2 Changing Permissions for a Database Account.....	192
5.6.3 Resetting the Password of a Database Account.....	195
5.6.4 Deleting a Database Account.....	197
5.6.5 Obtaining the Database Account List.....	198
5.6.6 Obtaining All Databases in an Instance.....	201
5.7 Tags.....	203
5.7.1 Querying an Instance by Tag.....	203
5.7.2 Adding or Deleting Resource Tags in Batches.....	208
5.7.3 Querying Tags of an Instance.....	211
5.7.4 Querying Tags of a Specified Project.....	213
5.8 Logs.....	216
5.8.1 Querying Database Slow Logs.....	216
5.8.2 Querying Slow Query Logs of a GeminiDB Redis Instance.....	219
5.8.3 Querying Slow Query Logs of a GeminiDB Cassandra Instance.....	225
5.8.4 Querying Slow Query Logs of a GeminiDB Mongo Instance.....	229
5.8.5 Querying Database Error Logs.....	234
5.8.6 Querying Error Logs of a GeminiDB Mongo Instance.....	237
5.8.7 Setting the Desensitization Status of Slow Query Logs.....	241
5.8.8 Querying the Desensitization Status of Slow Query Logs.....	242
5.8.9 Associating Instances with an LTS Log Stream.....	244
5.8.10 Disassociating Instances from an LTS Log Stream.....	246
5.8.11 Querying LTS Log Configurations.....	248
5.9 Quotas.....	252
5.9.1 Querying Quota.....	252
5.10 Disaster Recovery.....	254
5.10.1 Querying Regions Where a Dual-Active Relationship Can Be Created Between Two Instances.....	254
5.10.2 Checking Whether a DR Relationship Can Be Created with or Deleted from a Specified Instance	255
5.10.3 Creating a DR Relationship with a Specified Instance.....	258
5.10.4 Deleting a DR Relationship from a Specific Instance.....	261
5.10.5 Obtaining Role Information of a DR Instance.....	262
5.10.6 Promoting a DR Instance from Standby to Primary.....	264
5.10.7 Demoting a DR Instance from Primary to Standby.....	266
5.10.8 Pausing/Resuming Data Synchronization Between Two Instances with a DR Relationship.....	267
5.10.9 Obtaining the Status of Data Synchronization Between Two DR Instances.....	269
5.11 Task Management.....	273

5.11.1 Querying Tasks and Details.....	273
5.12 Enterprise Projects.....	278
5.12.1 Querying Enterprise Project Quotas.....	278
5.12.2 Modifying Enterprise Project Quotas.....	281
6 API v3 (Unavailable Soon).....	284
6.1 Instance Specifications.....	284
6.2 Parameter Templates.....	288
6.2.1 Obtaining Parameter Templates.....	288
6.3 Tags.....	290
6.3.1 Querying an Instance by Tag.....	290
7 Permission Policies and Supported Actions.....	297
7.1 Introduction.....	297
7.2 GeminiDB Actions.....	298
8 Appendixes.....	306
8.1 Abnormal Request Results.....	306
8.2 Status Codes.....	306
8.3 Error Codes.....	308
8.4 Obtaining a Project ID.....	342
8.5 Metrics.....	343
8.6 Events Supported by Event Monitoring.....	358
A Change History.....	367

1 Before You Start

1.1 Overview

Welcome to GeminiDB API Reference. This document describes how to use application programming interfaces (APIs) to perform operations on GeminiDB, such as creating, deleting, and querying DB instances. For details about all supported operations, see [API Overview](#).

If you want to access GeminiDB using an API, ensure that you are familiar with GeminiDB concepts. For details, see [Service Overview](#).

1.2 API Calling

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

1.3 Endpoints

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

1.4 Constraints

For more constraints, see the description of each API.

1.5 Concepts

- Account

A domain is created upon successful registration. The domain has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity

and should not be used directly to perform routine management. For security purposes, create 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).

API authentication requires information such as the account name, username, and password.

- Region

A region is a geographic area in which cloud resources are deployed.

Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other.

Deploying cloud resources in different regions can better suit certain user requirements or comply with local laws or regulations.

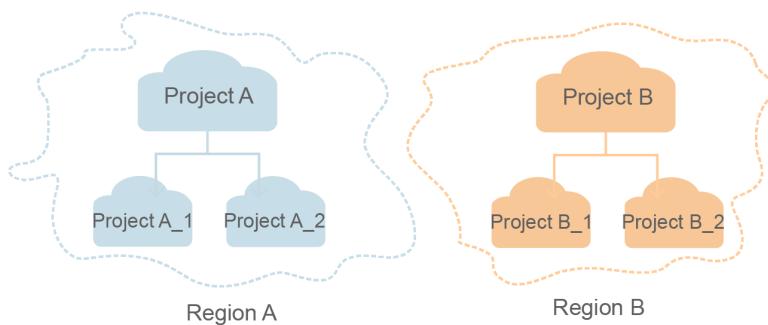
- AZ

An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, and electricity facilities. Within an AZ, computing, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are connected using high-speed optical fibers to support cross-AZ high-availability systems.

- Project

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

Figure 1-1 Project isolating model



- Enterprise Project

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

2 API Overview

GeminiDB provides extended APIs. These APIs enable you to use some functions of GeminiDB.

Table 2-1 API description

Type	Description
API Version Queries	<ul style="list-style-type: none">Query API versions.Query version information of a specific API.
DB Version Queries	Query version information of a specified type of instances.
Instance Specifications Queries	Query all instance specifications under a specified condition.
Instance Management	Create, delete, and query instances, scale up or down the instance storage space, add or delete cluster instance nodes, change instance specifications, and change the instance administrator password, instance name, and instance security group.
Backup and Restoration	Query and set automated backup policies.
Parameter Management	Obtain parameter templates, create a parameter template, modify parameters in a parameter template, apply a parameter template, modify or obtain parameters of a specified instance, obtain parameters of a specified parameter template, and delete a parameter template.
Tag Management	Query resources by tag, batch add and delete tags, and query resource tags.
Log Management	Query database slow query logs.
Quota Management	Query quotas.

Type	Description
Disaster Recovery (DR) Management	Checking whether a DR relationship can be created for one instance with a specified one or deleted, creating a DR relationship between one instance and a specified instance, and deleting a DR relationship between two them.

3 Calling APIs

3.1 Making an API Request

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

Request URI

A request URI consists of the following:

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

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

Table 3-1 URI parameter description

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service endpoint. The endpoint varies depending on services and regions. It can be obtained from Regions and Endpoints . For example, the endpoint of IAM in the CN-Hong Kong region is iam.ap-southeast-1.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of the API. For example, the resource-path of the API for obtaining a user token is /v3/auth/tokens .

Parameter	Description
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of "Parameter name=Parameter value". For example, ? limit=10 indicates that up to 10 data records will be displayed.

Request Methods

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

Table 3-2 HTTP methods

Method	Description
GET	Requests a server to return specified resources.
PUT	Requests a server to update specified resources.
POST	Requests a server to add a resource or perform a special operation.
DELETE	Requests a server to delete a specified resource (for example, an object).

For example, in the URI for [obtaining a user token](#), the request method is POST. The request is as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
```

Request Header

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

[Table 3-3](#) lists common request header fields.

Table 3-3 Common request headers

Parameter	Description	Mandatory	Example Value
Content-Type	MIME type of the request body. Use the default value application/json . For APIs used to upload objects or images, the value varies depending on the flow type.	Yes	application/json
Content-Length	Length of the request body. The unit is byte.	This field is optional for POST requests, but must be left blank for GET requests.	3495
X-Project-Id	Project ID. To obtain the project ID, see Obtaining a Project ID .	No	e9993fc787d94b6c886cb aa340f9c0f4
X-Auth-Token	User token. After a request is processed, the value of X-Subject-Token in the header is the token value.	Yes	The following is part of an example token: MIIPAgYJKoZIhvcNAQc-Co...ggg1BBIINPXsidG9rZ

The API used to [obtain a user token](#) does not require authentication. Therefore, this API only requires adding the **Content-Type** field. The following is an example request:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

(Optional) Request Body

This part is optional. The request body is often sent in a structured format (for example, JSON or XML) as specified in the **Content-Type** header field. If the request body contains full-width characters, these characters must be coded in UTF-8.

Request bodies vary depending on APIs. Some APIs do not require a request body, such as the APIs requested using the GET and DELETE methods.

For the API of [obtaining a user token](#), request parameters and parameter description can be obtained from the API request. The following is an example

request with a body included. Replace *username*, *domiannname*, ***** (login password), and xxxxxxxxxxxxxxxxxx (project namesuch as cn-north-1) with required values. You can obtain the values from [Regions and Endpoints](#).

NOTE

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

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

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

If all data required for the API request is available, you can send a request to call an API through [curl](#), [Postman](#), or coding. For the API of obtaining a user token, **x-subject-token** in the response header is the required user token. Then, this token can be used to authenticate the calling of other APIs.

3.2 Authentication

GeminiDB supports token-based authentication.

NOTE

The validity period of a token is 24 hours. If a token is required, the system caches the token to avoid frequent calling.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to a request to get permissions for calling the API.

If you want to use a token for authentication, you need to obtain the user's token and add **X-Auth-Token** to the request header of the service API to make an API call.

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

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

After a token is obtained, add field **X-Auth-Token** to the request header to specify the token when other APIs are called. For example, if the token is **ABCDEFJ....**, add **X-Auth-Token: ABCDEFJ....** to a request header as follows:

```
POST https://iam.ap-southeast-1.myhuaweicloud.com/v3/auth/projects  
Content-Type: application/json  
X-Auth-Token: ABCDEFJ....
```

3.3 Returned Values

Status Code

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

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

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

Response Header

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

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

Figure 3-1 Response header for the API used to obtain a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopener
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIYXQVJKoZlhvcNAQcCoIYTjCCGEoCAQEExDTALBglghkgBZQMEAqEwgharBgkqhkiG9w0BBwGggahcBIIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6ljlwMTktMDItMTNUMDfj3KUs6YgJNpVNRbW2eZ5eb78SZOkqjACgkIqO1wi4JlGzrpdi8LGXK5bxldfq4lqHCYb8P4NaY0NYejcAgzJVeFIYtLWT1GSO0zxkZmlQHQj82H8qHdgIzO9fuEbL5dMhdavj+33wElxHRC9E9B7o+k9-j+CMZSEB7bUGd5Uj6eRASX1jipPEGA270g1FruloL6jqgiFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUvHvpxk8pxiX1wTEboXRzT6MUbpvGw-oPNFYxJECKn0H3Rozv0vN--n5d6Nbvg=-
x-xss-protection → 1; mode=block;
```

(Optional) Response Body

This part is optional. A response body is generally returned in a structured format (for example, JSON or XML), corresponding to **Content-Type** in the response header, and is used to transfer content other than the response header.

If the following information is returned for calling the API used to [obtain a user token](#), the request is successful. The following describes part of the request body.

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

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

```
{
  "error_msg": "Parameter error",
  "error_code": "DBS.200001"
}
```

In the response, **error_code** indicates an error code, and **error_msg** describes the error.

4 Quick Start

This section describes how to create a GeminiDB Cassandra instance by calling APIs.

NOTE

The token obtained from IAM is valid for only 24 hours. If you want to use a token for authentication, you can cache it to avoid frequently obtaining the token.

Involved APIs

If you use a token for authentication, you must obtain the user's token and add **X-Auth-Token** to the request message header of the service API when making an API call.

- API for obtaining tokens from IAM
- API for creating a GeminiDB Cassandra instance

Procedure

1. Use a token for authentication by referring to [Authentication](#).
2. Send **POST https://{{Endpoint}}/v3/{{project_id}}/instances**.
3. Add **X-Auth-Token** to the request header.
4. Transfer the following parameters in the request body:

NOTE

Values of **region** and **availability_zone** are only for reference.

For details about the API for creating instances, see [Creating an Instance](#).

```
{  
    "name": "test-cassandra-01", //Instance name  
    "datastore": {  
        "type": "cassandra", //Database type  
        "version": "3.11", //DB engine version  
        "storage_engine": "rocksDB" //Storage engine  
    },  
    "region": "aaa", //Region  
    "availability_zone": "bbb", //AZ  
    "vpc_id": "674e9b42-cd8d-4d25-a2e6-5abcc565b961", //VPC ID  
    "subnet_id": "f1df08c5-71d1-406a-aff0-de435a51007b", //Subnet ID
```

```
"security_group_id": "7aa51dbf-5b63-40db-9724-dad3c4828b58", //Security group ID
"password": "xxxx", //Administrator password
"mode": "Cluster", //Instance type
"flavor": [
    {
        "num": 3, //Nodes
        "size": 500, //Storage space
        "storage": "ULTRAHIGH", //Disk type
        "spec_code": "geminidb.cassandra.4xlarge.4" //Resource specification code
    }
],
"backup_strategy": {
    "start_time": "08:00-09:00", //Backup time window
    "keep_days": "8" //Retention period of backup files
},
"enterprise_project_id": "0" //Enterprise project ID
}
```

If the following information is displayed, the request is successful:

```
{
    "id": "39b6a1a278844ac48119d86512e0000bin06",
    "name": "test-cassandra-01",
    "datastore": {
        "type": "cassandra",
        "version": "3.11",
        "storage_engine": "rocksDB"
    },
    "created": "2019-10-28 14:10:54",
    "status": "creating",
    "region": "aaa",
    "availability_zone": "bbb",
    "vpc_id": "674e9b42-cd8d-4d25-a2e6-5abcc565b961",
    "subnet_id": "f1df08c5-71d1-406a-aff0-de435a51007b",
    "security_group_id": "7aa51dbf-5b63-40db-9724-dad3c4828b58",
    "mode": "Cluster",
    "flavor": [
        {
            "num": 3,
            "size": 500,
            "storage": "ULTRAHIGH",
            "spec_code": "geminidb.cassandra.4xlarge.4"
        }
    ],
    "backup_strategy": {
        "start_time": "08:00-09:00",
        "keep_days": "8"
    },
    "job_id": "c010abd0-48cf-4fa8-8cbc-090f093eaa2f",
    "enterprise_project_id": "0"
}
```

If the request fails, an error code and error information are returned. For details, see [Error Codes](#).

5 APIs v3 (Recommended)

5.1 API Versions

5.1.1 Querying API Versions

Function

This API is used to query the supported API versions.

URI

GET https://{{Endpoint}}/

Request Parameters

None

Response Parameters

Status code: 200

Table 5-1 Response body parameters

Parameter	Type	Description
versions	Array of ApiVersionResponse objects	API version information

Table 5-2 ApiVersionResponse

Parameter	Type	Description
id	String	API version number
links	Array of Links objects	API link information NOTE If the version is v3, the value is [].
status	String	Version status
version	String	Subversion information of the API version
min_version	String	Minimum API version number
updated	String	Version update time The format is yyyy-mm-dd Thh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the UTC.

Table 5-3 Links

Parameter	Type	Description
href	String	API URL. The value is "".
rel	String	The value is self , indicating that URL is a local link.

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/

Example Response

Status code: 200

Success

```
{  
  "versions": [ {  
    "id": "v3",  
    "links": [ ],  
    "status": "CURRENT",  
    "version": "",  
    "min_version": "",  
    "updated": "2019-10-30T17:34:02Z"  
  } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.1.2 Querying Version Information of an API

Function

This API is used to query version information of a specified API.

URI

GET https://{{Endpoint}}/{{versionId}}

Table 5-4 Path parameters

Parameter	Mandatory	Type	Description
versionId	Yes	String	API version

Request Parameters

None

Response Parameters

Status code: 200

Table 5-5 Response body parameters

Parameter	Type	Description
version	ApiVersionResponse object	API version information

Table 5-6 ApiVersionResponse

Parameter	Type	Description
id	String	API version number
links	Array of Links objects	API link information NOTE If the version is v3, the value is [].
status	String	Version status

Parameter	Type	Description
version	String	Subversion information of the API version
min_version	String	Minimum API version number
updated	String	Version update time The format is yyyy-mm-dd Thh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the UTC.

Table 5-7 Links

Parameter	Type	Description
href	String	API URL. The value is "".
rel	String	The value is self , indicating that URL is a local link.

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3

Example Response

Status code: 200

Success

```
{  
  "version": {  
    "id": "v3",  
    "links": [],  
    "status": "CURRENT",  
    "version": "",  
    "min_version": "",  
    "updated": "2019-10-30T17:34:02Z"  
  }  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.2 Versions and Specifications

5.2.1 Querying Version Information

Function

This API is used to query version information of a specified type of instances.

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

URI

GET `https://{{Endpoint}}/v3/{{project_id}}/datastores/{{datastore_name}}/versions`

Table 5-8 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
datastore_name	Yes	String	Database type. The value can be: <ul style="list-style-type: none">• cassandra, indicating that the instances are of the GeminiDB Cassandra type.• mongodb, indicating that the instances are of the GeminiDB Mongo type.• influxdb, indicating that the instances are of the GeminiDB Influx type.• redis, indicating that the instances are of the GeminiDB Redis type.

Request Parameters

Table 5-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

Response Parameters

Status code: 200

Table 5-10 Response body parameters

Parameter	Type	Description
versions	Array of strings	Database version. The supported versions are: <ul style="list-style-type: none">• GeminiDB Cassandra instance 3.11• GeminiDB Mongo replica set 4.0• GeminiDB Influx instance 1.7• GeminiDB Influx instance 5.0

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/datastores/cassandra/versions

Example Responses

Status code: 200

Success

```
{  
  "versions" : [ "3.11" ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.2.2 Querying Instance Specifications

Function

This API is used to query all instance specifications under a specified condition.

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

URI

GET https://{{Endpoint}}/v3.1/{{project_id}}/flavors

Table 5-11 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Table 5-12 Query parameters

Parameter	Mandatory	Type	Description
engine_name	No	String	<p>Database type. The value can be:</p> <ul style="list-style-type: none">• cassandra, indicating that the instances are of the GeminiDB Cassandra type.• mongodb, indicating that the instances are of the GeminiDB Mongo type.• influxdb, indicating that the instances are of the GeminiDB Influx type.• redis, indicating that the instances are of the GeminiDB Redis type.• If this parameter is not transferred, the default value is cassandra.

Parameter	Mandatory	Type	Description
offset	No	Integer	<p>Index offset.</p> <ul style="list-style-type: none">If offset is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If action is set to filter, offset is 0 by default, indicating that the query starts from the first piece of data.The offset value must be a number but cannot be a negative number.
limit	No	Integer	<p>Maximum of specifications that can be queried</p> <ul style="list-style-type: none">The value ranges from 1 to 100.If this parameter is not transferred, the first 100 pieces of specification information is queried by default.

Request Parameters

Table 5-13 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

Response Parameters

Status code: 200

Table 5-14 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records
flavors	Array of Flavors objects	Instance specifications

Table 5-15 Flavors

Parameter	Type	Description
engine_name	String	API name.
engine_version	String	API version.
vcpus	String	Number of vCPUs
ram	String	Memory size in megabytes (MB)
spec_code	String	<p>Resource specification code. Example: geminidb.cassandra.8xlarge.4</p> <p>NOTE</p> <ul style="list-style-type: none">• geminidb.cassandra indicates the instance is a GeminiDB Cassandra instance.• 8xlarge.4 indicates node specifications.
availability_zone	Array of strings	<p>ID of the AZ that supports the specifications</p> <p>NOTE This parameter has been discarded. Do not use it.</p>
az_status	Object	<p>The status of specifications in an AZ. The value can be:</p> <ul style="list-style-type: none">• normal, indicating that the specifications are on sale.• unsupported, indicating that the specifications are not supported.• sellout, indicating that the specifications are sold out.

Example Requests

URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3.1/375d8d8fad1f43039e23d3b6c0f60a19/flavors?engine_name=cassandra&offset=0&limit=10
```

Example Responses

Status code: 200

Success

```
{  
    "total_count": 4,  
    "flavors": [ {  
        "engine_name": "cassandra",  
        "engine_version": "3.11",  
        "vcpus": "4",  
        "spec_code": "geminidb.cassandra.8xlarge.4"  
    } ]  
}
```

```
"ram" : "16",
"spec_code" : "geminidb.cassandra.xlarge.4",
"availability_zone" : [ "az1", "az2" ],
"az_status" : {
    "az1" : "normal",
    "az2" : "unsupported"
},
{
    "engine_name" : "cassandra",
    "engine_version" : "3.11",
    "vcpus" : "8",
    "ram" : "32",
    "spec_code" : "geminidb.cassandra.2xlarge.4",
    "availability_zone" : [ "az1", "az2" ],
    "az_status" : {
        "az1" : "unsupported",
        "az2" : "normal"
    }
},
{
    "engine_name" : "cassandra",
    "engine_version" : "3.11",
    "vcpus" : "16",
    "ram" : "64",
    "spec_code" : "geminidb.cassandra.4xlarge.4",
    "availability_zone" : [ "az1", "az2" ],
    "az_status" : {
        "az1" : "normal",
        "az2" : "sellout"
    }
},
{
    "engine_name" : "cassandra",
    "engine_version" : "3.11",
    "vcpus" : "32",
    "ram" : "128",
    "spec_code" : "geminidb.cassandra.8xlarge.4",
    "availability_zone" : [ "az1", "az2" ],
    "az_status" : {
        "az1" : "normal",
        "az2" : "normal"
    }
}
]
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.2.3 Querying Dedicated Resources

Function

This API is used to query dedicated resources created by a user.

Constraints

This API supports GeminiDB Cassandra instances.

URI

GET https://{{Endpoint}}/v3/{project_id}/dedicated-resources

Table 5-16 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Table 5-17 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	<p>Index position. The query starts from the dedicated resource created after the dedicated resource indexed by this parameter in a specified project. If offset is set to N, the resource query starts from the $N+1$ piece of data.</p> <ul style="list-style-type: none">The value must be no less than 0.If this parameter is not transferred, offset is set to 0 by default, indicating that the query starts from the latest created dedicated resource.
limit	No	Integer	<p>Maximum of dedicated resources to be queried.</p> <ul style="list-style-type: none">The value ranges from 1 to 100.If this parameter is not transferred, the first 100 instances are queried by default.

Request Parameters

None

Response Parameters

Status code: 200

Table 5-18 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records
resources	Array of DedicatedResource objects	Dedicated resource information

Table 5-19 DedicatedResource

Parameter	Type	Description
id	String	Dedicated resource ID
resource_name	String	Dedicated resource name
engine_name	String	API name.
availability_zone	String	AZ information
architecture	String	Type of dedicated compute hosts. The value can be X86 or ARM .
capacity	DedicatedResource-Capacity object	Capacity of the dedicated resource
status	String	Status of the dedicated resource. The value can be: <ul style="list-style-type: none">• NORMAL: indicating that the dedicated resource is available.• BUILDING, indicating that the dedicated resource is being built.

Table 5-20 DedicatedResourceCapacity

Parameter	Type	Description
vcpus	Integer	Number of vCPUs
ram	Integer	Memory size in GB
volume	Integer	Storage size in GB

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/
dedicated-resources?offset=0&limit=10

Example Responses

Status code: 200

Success

```
{  
    "total_count": 2,  
    "resources": [ {  
        "id": "300acc71-eca9-4c6b-9a4e-0d25e20fe54c",  
        "resource_name": "nosql-dedicated-resource-1",  
        "engine_name": "cassandra",  
        "availability_zone": "az1,az2,az3",  
        "architecture": "X86",  
        "capacity": {  
            "vcpus": 192,  
            "ram": 1536,  
            "volume": 300000  
        },  
        "status": "NORMAL"  
    }, {  
        "id": "4c423cd8-551f-4b74-934f-8534e4a9bf2b",  
        "resource_name": "nosql-dedicated-resource-2",  
        "engine_name": "cassandra",  
        "availability_zone": "az1,az2,az3",  
        "architecture": "X86",  
        "capacity": {  
            "vcpus": 192,  
            "ram": 1536,  
            "volume": 300000  
        },  
        "status": "BUILDING"  
    } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.3 Instances

5.3.1 Creating an Instance

Function

- This API can be used to create an instance.
- The API can be used to create an instance when you restore data using a specific backup.
- The API can also be used to create an instance when you restore data of a specific instance to a specified point in time.

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

This API supports both yearly/monthly and pay-per-use instances.

Only GeminiDB Cassandra and GeminiDB Influx allow you to restore data of a specified time point from a specified cluster instance to a new one.

URI

POST https://{Endpoint}/v3/{project_id}/instances

Table 5-21 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

Table 5-22 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-23 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Instance name, which can be the same as an existing instance name. The name must start with a letter and can include 4 to 64 characters. It is case-sensitive and can contain only letters, digits, hyphens (-), and underscores (_).

Parameter	Mandatory	Type	Description
datastore	Yes	Datastore object	Database information.
region	Yes	String	Region ID. The value cannot be empty. For value details, see Regions and Endpoints .
availability_zone	Yes	String	AZ ID. For details about the value, see az_status returned in Querying Instance Specifications . If an instance can be created across three AZs, separate multiple AZ IDs by commas (,).
vpc_id	Yes	String	VPC ID. You can obtain the value with either of the following methods: <ul style="list-style-type: none">Method 1: Log in to the VPC console and view the VPC ID on the VPC details page.Method 2: Query the VPC ID using the VPC API. For details, see Querying VPCs.
subnet_id	Yes	String	Subnet ID. You can obtain the subnet ID with either of the following methods: <ul style="list-style-type: none">Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the network ID on the displayed page.Method 2: Query the subnet ID using the VPC API. For details, see Querying Subnets.

Parameter	Mandatory	Type	Description
security_group_id	Yes	String	<p>Security group ID. You can obtain the security group ID with either of the following methods:</p> <ul style="list-style-type: none">Method 1: Log in to the VPC console. Choose Access Control > Security Groups in the navigation pane on the left. On the displayed page, click the target security group. You can view the security group ID on the displayed page.Method 2: Query the security group through the VPC API. For details, see Querying Security Groups.
password	Yes	String	<p>Database password.</p> <p>The password can include 8 to 32 characters and contain uppercase letters, lowercase letters, digits, and the following special characters: ~!@#%^*-_=+? The password of GeminiDB Redis instances can contain at least two types of the following characters: uppercase letters, lowercase letters, digits, and special characters (~!@#\$%^&*()_-_=+?).</p> <p>Enter a strong password against security risks such as brute force cracking.</p>

Parameter	Mandatory	Type	Description
mode	Yes	String	<p>Instance type. The value can be:</p> <ul style="list-style-type: none">• Cluster, indicating that GeminiDB Cassandra supports the cluster type.• ReplicaSet, indicating that GeminiDB Mongo 4.0 supports the replica set type.• Cluster, indicating that GeminiDB Influx supports the cluster type.• InfluxdbSingle, indicating that GeminiDB Influx supports the single-node instance type.• Cluster, indicating that GeminiDB Redis supports the cluster type.
flavor	Yes	Array of Flavor objects	<p>Instance specifications. For details about the specifications, see parameter values under flavors in Querying Instance Specifications.</p>
configuration_id	No	String	Parameter template ID.
backup_strategy	No	BackupStrategy object	Advanced backup policy.

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	<p>Enterprise project ID.</p> <ul style="list-style-type: none">• Do not transfer this parameter if EPS is not enabled.• If EPS is enabled but this parameter is not transferred, the default enterprise project is used. For the enterprise project ID, see the id value in the enterprise_project field data structure table in section "Querying the Enterprise Project List" of the <i>Enterprise Project Management Service API Reference</i>.
ssl_option	No	String	<p>Whether SSL is enabled. The value can be:</p> <ul style="list-style-type: none">• 0, indicating that SSL is disabled by default.• 1, indicating that SSL is enabled by default.• If this parameter is not transferred, SSL is disabled by default.
charge_info	No	ChargeInfo object	Billing mode, which includes yearly/monthly and pay-per-use. The default billing mode is pay-per-use.
dedicated_resource_id	No	String	Dedicated resource ID. This parameter can be delivered only after the dedicated resource pool is enabled.
restore_info	No	RestoreInfo object	<p>Backup information. You can restore data from a specific backup or instance to a specific point in time during the backup retention period. Only GeminiDB Cassandra and GeminiDB Influx allow you to restore data from a specific cluster instance to a specific point in time.</p>

Parameter	Mandatory	Type	Description
port	No	String	<p>Port number for accessing the instance.</p> <p>You can specify a port number for accessing the GeminiDB Redis instances. The port number ranges from 1024 to 65535, excluding 2180, 2887, 3887, 6377, 6378, 6380, 8018, 8079, 8091, 8479, 8484, 8999, 12017, 12333, and 50069.</p> <p>If you do not specify a port number, port 6379 is used by default when you create a GeminiDB Redis instance.</p> <p>If you want to use this instance for dual-active DR, set the port to 8635.</p>
availability_zone_detail	No	object	<p>Multi-AZ details of the active/standby instance</p> <p>Currently, only GeminiDB Redis instances are supported.</p> <p>The system ignores this parameter if single-AZ deployment is selected. For details, see Table 5-29.</p>

Table 5-24 Datastore

Parameter	Mandatory	Type	Description
type	Yes	String	<p>Database type.</p> <ul style="list-style-type: none">• The supported instance types include GeminiDB Cassandra, GeminiDB Mongo, GeminiDB Influx, and GeminiDB Redis.• If you set this parameter to cassandra, GeminiDB Cassandra instances will be created.• If you set this parameter to mongodb, GeminiDB Mongo instances will be created.• If you set this parameter to influxdb, GeminiDB Influx instances will be created.• If you set this parameter to redis, GeminiDB Redis instances will be created.
version	Yes	String	<p>Database version. The value can be:</p> <ul style="list-style-type: none">• 3.11, indicating that GeminiDB Cassandra 3.11 is supported.• 4.0, indicating that GeminiDB Mongo 4.0 is supported.• 1.7, indicating that GeminiDB Influx 1.7 is supported.• 5.0, indicating that GeminiDB Redis 5.0 is supported.

Parameter	Mandatory	Type	Description
storage_engine	Yes	String	<p>Storage engine.</p> <ul style="list-style-type: none">• rocksDB, indicating that the GeminiDB Cassandra instance supports the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Mongo instance supports the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Influx instance supports the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Redis instance supports the RocksDB storage engine.

Table 5-25 Flavor

Parameter	Mandatory	Type	Description
num	Yes	String	<p>Number of nodes.</p> <ul style="list-style-type: none">• Each GeminiDB Cassandra instance can contain 3 to 60 nodes.• Each GeminiDB Mongo replica set 4.0 can contain 3 nodes.• Each GeminiDB Influx cluster instance can contain 3 to 16 nodes.• Each GeminiDB Influx single-node instance can contain 1 node.• Each GeminiDB Redis instance can contain 3 to 12 nodes.

Parameter	Mandatory	Type	Description
size	Yes	String	<p>Storage space. It must be an integer, in GB.</p> <p>For GeminiDB Cassandra, GeminiDB Mongo, and GeminiDB Influx instances, the minimum storage space is 100 GB, and the maximum limit depends on instance specifications. The maximum and minimum storage space of a GeminiDB Redis instance depends on node quantity and specifications of the instance.</p> <ul style="list-style-type: none">• For details about GeminiDB Cassandra instances, see Instance Specifications.• For details about GeminiDB Mongo instances, see Instance Specifications.• For details about GeminiDB Influx instances, see Instance Specifications.• For details about GeminiDB Redis instances, see Instance Specifications.
storage	Yes	String	<p>Disk type.</p> <p>If you set this parameter to ULTRAHIGH, SSD disks are used.</p>
spec_code	Yes	String	<p>Resource specification code.</p> <p>For the code, see the value of response parameter spec_code in Querying Instance Specifications.</p>

Table 5-26 BackupStrategy

Parameter	Mandatory	Type	Description
start_time	Yes	String	<p>Backup time window. Automated backup will be triggered during the backup time window.</p> <p>The value cannot be empty. It must be the UTC time in the hh:mm-HH:MM format.</p> <ul style="list-style-type: none">• The HH value must be 1 greater than the hh value.• The values of mm and MM must be the same and must be set to 00, 15, 30, or 45.• If this parameter is not transferred, the default backup time window is from 00:00 to 01:00.• Example value: 23:00-00:00
keep_days	No	String	<p>Backup retention days.</p> <p>The value ranges from 0 to 35.</p> <ul style="list-style-type: none">• If this parameter is set to 0, the automated backup policy is not set.• If this parameter is not transferred, the automated backup policy is enabled by default. Backup files are stored for 7 days by default.

Table 5-27 ChargeInfo

Parameter	Mandatory	Type	Description
charge_mode	Yes	String	<p>Billing mode.</p> <p>Value options:</p> <ul style="list-style-type: none">• prePaid: indicates that the billing mode is yearly/monthly.• postPaid: indicates that the billing mode is pay-per-use.

Parameter	Mandatory	Type	Description
period_type	No	String	<p>Subscription period type. Value options:</p> <ul style="list-style-type: none"> • month: indicates that the subscription unit is month. • year: indicates that the subscription unit is year. <p>NOTE This parameter is valid and mandatory only when charge_mode is set to prePaid.</p>
period_num	No	String	<p>Subscription time period. This parameter is valid and mandatory only when charge_mode is set to prePaid. Value options:</p> <ul style="list-style-type: none"> • If period_type is set to month, the parameter value ranges from 1 to 9. • If period_type is set to year, the parameter value ranges from 1 to 3.
is_auto_renew	No	String	<p>Whether automatic renewal is enabled for yearly/monthly instances. The renewal period is the same as the original period, and the order will be automatically paid during the renewal. The value can be:</p> <ul style="list-style-type: none"> • true, indicating that the subscription is automatically renewed. • false, indicating that the subscription is not automatically renewed. The default value is false.

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	<p>Payment method. When you create a yearly/monthly instance, you can specify whether the order is automatically paid from your account. This parameter does not affect the payment mode of automatic renewal. The value can be:</p> <ul style="list-style-type: none">• true, indicating that the order is automatically paid from your account.• false, indicating that the order needs to be manually paid from your account. This payment method is used by default.

Table 5-28 RestoreInfo

Parameter	Mandatory	Type	Description
backup_id	No	String	<p>Full backup file ID. This parameter cannot be left blank when you create an instance to restore data using a specific backup.</p>
source_instance_id	No	String	<p>ID of the specified instance that backup data is restored to. This parameter cannot be left blank when you restore data at a specific time point from a specific instance to a new instance.</p>
restore_time	No	Long	<p>Time point that backup data is restored to. This parameter cannot be left blank when you restore data at a specific point in time from a specific instance to a new instance. The value is a 13-digit number (in milliseconds, UTC time). You can query the value by referring to Querying the Time Window When a Backup Can Be Restored.</p>

Table 5-29 AvailabilityZoneDetail

Parameter	Mandatory	Type	Description
primary_availability_zone	Yes	String	The primary AZ must be a single AZ and be different from the standby AZ.
secondary_availability_zone	Yes	String	The standby AZ must be a single AZ and be different from the primary AZ.

Response Parameters

Status code: 202

Table 5-30 Response body parameters

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name. This parameter is the same as the corresponding request parameter.
datastore	Datastore object	Database information. This parameter is the same as the corresponding request parameter.
created	String	Creation time, which is in the yyyy-mm-dd hh:mm:ss format.
status	String	Instance status. The value is creating .
region	String	Region ID. This parameter is the same as the corresponding request parameter.
availability_zone	String	AZ ID. This parameter is the same as the corresponding request parameter.
vpc_id	String	VPC ID. This parameter is the same as the corresponding request parameter.
subnet_id	String	Subnet ID. This parameter is the same as the corresponding request parameter.
security_group_id	String	Security group ID. This parameter is the same as the corresponding request parameter.

Parameter	Type	Description
mode	String	Instance type. This parameter is the same as the corresponding request parameter.
flavor	Array of Flavor objects	Instance specifications. This parameter is the same as the corresponding request parameter.
backup_strategy	BackupStrategy object	Advanced backup policy. This parameter is the same as the corresponding request parameter.
enterprise_project_id	String	Enterprise project ID. If you set this parameter to 0 , the resource belongs to the default enterprise project.
ssl_option	String	Whether SSL is enabled. This parameter has the same effect as the corresponding request parameter.
job_id	String	ID of the workflow for creating an instance. This parameter is returned only when a pay-per-use instance is created.
order_id	String	ID of the order for creating an instance. This parameter is returned only when you create a yearly/monthly instance.
charge_info	ChargeInfo object	Billing mode, which includes yearly/monthly and pay-per-use. The default billing mode is pay-per-use.
dedicated_resource_id	String	Dedicated resource ID. This parameter is returned only when the DB instance belongs to a dedicated resource pool.

Table 5-31 Datastore

Parameter	Type	Description
type	String	<p>Database type.</p> <ul style="list-style-type: none">• The supported instance types include GeminiDB Cassandra, GeminiDB Mongo, GeminiDB Influx, and GeminiDB Redis.• If you set this parameter to cassandra, GeminiDB Cassandra instances will be created.• If you set this parameter to mongodb, GeminiDB Mongo instances will be created.• If you set this parameter to influxdb, GeminiDB Influx instances will be created.• If you set this parameter to redis, GeminiDB Redis instances will be created.
version	String	<p>Database version. The value can be:</p> <ul style="list-style-type: none">• 3.11, indicating that GeminiDB Cassandra 3.11 is supported.• 4.0, indicating that GeminiDB Mongo 4.0 is supported.• 1.7, indicating that GeminiDB Influx 1.7 is supported.• 5.0, indicating that GeminiDB Redis 5.0 is supported.
storage_engine	String	<p>Storage engine.</p> <ul style="list-style-type: none">• rocksDB, indicating that the GeminiDB Cassandra instance support the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Mongo instance support the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Influx instance support the RocksDB storage engine.• rocksDB, indicating that the GeminiDB Redis instance support the RocksDB storage engine.

Table 5-32 Flavor

Parameter	Type	Description
num	String	<p>Number of nodes.</p> <ul style="list-style-type: none">• Each GeminiDB Cassandra instance can contain 3 to 60 nodes.• Each GeminiDB Mongo replica set 4.0 can contain 3 nodes.• Each GeminiDB Influx instance can contain 3 to 16 nodes.• Each GeminiDB Redis instance can contain 3 to 12 nodes.
size	String	<p>Storage space. It must be an integer, in GB.</p> <p>For GeminiDB Cassandra, GeminiDB Mongo, and GeminiDB Influx instances, the minimum storage space is 100 GB, and the maximum limit depends on instance specifications. The maximum and minimum storage space of a GeminiDB Redis instance depends on node quantity and specifications of the instance.</p> <ul style="list-style-type: none">• For details about GeminiDB Cassandra instances, see Instance Specifications.• For details about GeminiDB Mongo instances, see Instance Specifications.• For details about GeminiDB Influx instances, see Instance Specifications.• For details about GeminiDB Redis instances, see Instance Specifications.
storage	String	<p>Disk type.</p> <p>If you set this parameter to ULTRAHIGH, SSD disks are used.</p>
spec_code	String	<p>Resource specification code.</p> <p>For the code, see the value of response parameter spec_code in Querying Instance Specifications.</p>

Table 5-33 BackupStrategy

Parameter	Type	Description
start_time	String	<p>Backup time window. Automated backup will be triggered during the backup time window.</p> <p>The value cannot be empty. It must be the UTC time in the hh:mm-HH:MM format.</p> <ul style="list-style-type: none">• The HH value must be 1 greater than the hh value.• The values of mm and MM must be the same and must be set to 00, 15, 30, or 45.• If this parameter is not transferred, the default backup time window is from 00:00 to 01:00.• Example value: 23:00-00:00
keep_days	String	<p>Backup retention days.</p> <p>The value ranges from 0 to 35.</p> <ul style="list-style-type: none">• If this parameter is set to 0, the automated backup policy is not set.• If this parameter is not transferred, the automated backup policy is enabled by default. Backup files are stored for 7 days by default.

Table 5-34 ChargeInfo

Parameter	Type	Description
charge_mode	String	<p>Billing mode.</p> <p>Values:</p> <ul style="list-style-type: none">• prePaid: indicates that the billing mode is yearly/monthly.• postPaid: indicates that the billing mode is pay-per-use.

Parameter	Type	Description
period_type	String	<p>Subscription period type.</p> <p>Values:</p> <ul style="list-style-type: none">• month: indicates that the subscription unit is month.• year: indicates that the subscription unit is year. <p>NOTE</p> <p>This parameter is available and mandatory only when charge_mode is set to prePaid.</p>
period_num	String	<p>Subscription time period. This parameter is available and mandatory only when charge_mode is set to prePaid.</p> <p>Value options:</p> <ul style="list-style-type: none">• If period_type is set to month, the parameter value ranges from 1 to 9.• If period_type is set to year, the parameter value ranges from 1 to 3.
is_auto_renew	String	<p>Whether automatic renewal is enabled for yearly/monthly instances. The renewal period is the same as the original period, and the order will be automatically paid during the renewal. The value can be:</p> <ul style="list-style-type: none">• true, indicating that the subscription is automatically renewed.• false, indicating that the subscription is not automatically renewed. The default value is false.

Parameter	Type	Description
is_auto_pay	String	<p>Payment method. When you create a yearly/monthly instance, you can specify whether the order is automatically paid from your account. This parameter does not affect the payment mode of automatic renewal. The value can be:</p> <ul style="list-style-type: none">• true, indicating that the order is automatically paid from your account.• false, indicating that the order needs to be manually paid from your account. This payment method is used by default.

Example Requests

- **URI example**
POST https://[Endpoint]/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances
- Creating a pay-per-use 3-node GeminiDB Cassandra instance with 16 vCPUs and 64 GB of memory

NOTE

Values of **region** and **availability_zone** in the request body are only examples. Set them based on service requirements.

```
{  
    "name" : "test-cassandra-01",  
    "datastore" : {  
        "type" : "cassandra",  
        "version" : "3.11",  
        "storage_engine" : "rocksDB"  
    },  
    "region" : "aaa",  
    "availability_zone" : "bbb",  
    "vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",  
    "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007",  
    "security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",  
    "password" : "*****",  
    "mode" : "Cluster",  
    "flavor" : [ {  
        "num" : 3,  
        "storage" : "ULTRAHIGH",  
        "size" : 500,  
        "spec_code" : "geminidb.cassandra.4xlarge.4"  
    },  
    "backup_strategy" : {  
        "start_time" : "08:15-09:15",  
        "keep_days" : 8  
    },  
    "ssl_option" : 1  
}
```

- Creating a yearly/monthly 3-node GeminiDB Cassandra instance with 16 vCPUs and 64 GB of memory

NOTE

Values of **region** and **availability_zone** in the request body are only examples. Set them based on service requirements.

```
{  
    "name" : "test-cassandra-01",  
    "datastore": {  
        "type" : "cassandra",  
        "version" : "3.11",  
        "storage_engine" : "rocksDB"  
    },  
    "region" : "aaa",  
    "availability_zone" : "bbb",  
    "vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",  
    "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007",  
    "security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",  
    "password" : "*****",  
    "mode" : "Cluster",  
    "flavor" : [ {  
        "num" : 3,  
        "storage" : "ULTRAHIGH",  
        "size" : 500,  
        "spec_code" : "geminidb.cassandra.4xlarge.4"  
    } ],  
    "backup_strategy" : {  
        "start_time" : "08:15-09:15",  
        "keep_days" : 8  
    },  
    "ssl_option" : 1,  
    "charge_info" : {  
        "charge_mode" : "prePaid",  
        "period_type" : "year",  
        "period_num" : 3,  
        "is_auto_renew" : true,  
        "is_auto_pay" : true  
    }  
}
```

- Creating a pay-per-use 3-node GeminiDB Cassandra instance with 16 vCPUs and 64 GB of memory based on data restored using a specific backup

NOTE

Values of **region** and **availability_zone** in the request body are only examples. Set them based on service requirements.

```
{  
    "name" : "test-cassandra-01",  
    "datastore": {  
        "type" : "cassandra",  
        "version" : "3.11",  
        "storage_engine" : "rocksDB"  
    },  
    "region" : "aaa",  
    "availability_zone" : "bbb",  
    "vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",  
    "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007",  
    "security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",  
    "password" : "*****",  
    "mode" : "Cluster",  
    "flavor" : [ {  
        "num" : 3,  
        "storage" : "ULTRAHIGH",  
        "size" : 500,  
        "spec_code" : "geminidb.cassandra.4xlarge.4"  
    } ],  
    "backup_strategy" : {  
        "start_time" : "08:15-09:15",  
        "keep_days" : 8  
    }  
}
```

- ```
 },
 "ssl_option" : 1,
 "restore_info" : {
 "backup_id" : "2f4ddb93b9014b0893d81d2e472f30fe"
 }
 }
```
- Creating a yearly/monthly 3-node GeminiDB Cassandra instance with 16 vCPUs and 64 GB of memory based on the data of a specified instance at a specified point in time

 **NOTE**

Values of **region** and **availability\_zone** in the request body are only examples. Set them based on service requirements.

```
{
 "name" : "test-cassandra-01",
 "datastore" : {
 "type" : "cassandra",
 "version" : "3.11",
 "storage_engine" : "rocksDB"
 },
 "region" : "aaa",
 "availability_zone" : "bbb",
 "vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007",
 "security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",
 "password" : "*****",
 "mode" : "Cluster",
 "flavor" : [{
 "num" : 3,
 "storage" : "ULTRAHIGH",
 "size" : 500,
 "spec_code" : "geminidb.cassandra.4xlarge.4"
 }],
 "backup_strategy" : {
 "start_time" : "08:15-09:15",
 "keep_days" : 8
 },
 "ssl_option" : 1,
 "charge_info" : {
 "charge_mode" : "prePaid",
 "period_type" : "year",
 "period_num" : 3,
 "is_auto_renew" : true,
 "is_auto_pay" : true
 },
 "restore_info" : {
 "restore_time" : 1607731200000,
 "source_instance_id" : "054e292c9880d4992f02c0196d3ein12"
 }
}
```

## Example Responses

### Status code: 202

Accepted

Creating a pay-per-use instance:

```
{
 "id" : "39b6a1a278844ac48119d86512e0000bin06",
 "name" : "test-cassandra-01",
 "datastore" : {
 "type" : "cassandra",
 "version" : "3.11",
 }
}
```

```
 "storage_engine" : "rocksDB"
 },
 "created" : "2019-10-28 14:10:54",
 "status" : "creating",
 "region" : "aaa",
 "availability_zone" : "bbb,ccc,ddd",
 "vpc_id" : "490a4a08-ef4b-44c5-94be-3051ef9e4fce",
 "subnet_id" : "0e2eda62-1d42-4d64-a9d1-4e9aa9cd994f",
 "security_group_id" : "2a1f7fc8-3307-42a7-aa6f-42c8b9b8f8c5",
 "mode" : "Cluster",
 "flavor" : [{
 "num" : 3,
 "size" : 500,
 "storage" : "ULTRAHIGH",
 "spec_code" : "geminidb.cassandra.4xlarge.4"
 }],
 "backup_strategy" : {
 "start_time" : "08:15-09:15",
 "keep_days" : "8"
 },
 "ssl_option" : "1",
 "job_id" : "c010abd0-48cf-4fa8-8cbc-090f093eaa2f"
}
```

Creating a yearly/monthly instance:

```
{
 "id" : "39b6a1a278844ac48119d86512e0000bin06",
 "name" : "test-cassandra-01",
 "datastore" : {
 "type" : "cassandra",
 "version" : "3.11",
 "storage_engine" : "rocksDB"
 },
 "created" : "2019-10-28 14:10:54",
 "status" : "creating",
 "region" : "aaa",
 "availability_zone" : "bbb,ccc,ddd",
 "vpc_id" : "490a4a08-ef4b-44c5-94be-3051ef9e4fce",
 "subnet_id" : "0e2eda62-1d42-4d64-a9d1-4e9aa9cd994f",
 "security_group_id" : "2a1f7fc8-3307-42a7-aa6f-42c8b9b8f8c5",
 "mode" : "Cluster",
 "flavor" : [{
 "num" : 3,
 "size" : 500,
 "storage" : "ULTRAHIGH",
 "spec_code" : "geminidb.cassandra.4xlarge.4"
 }],
 "backup_strategy" : {
 "start_time" : "08:15-09:15",
 "keep_days" : "8"
 },
 "enterprise_project_id" : "0",
 "ssl_option" : "1",
 "charge_info" : {
 "charge_mode" : "prePaid",
 "period_type" : "year",
 "period_num" : 3,
 "is_auto_renew" : true,
 "is_auto_pay" : true
 }
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.2 Deleting an Instance

#### Function

This API is used to delete an instance. Only pay-per-use instances can be deleted. Yearly/Monthly instances need to be unsubscribed from if they are no longer needed.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

#### URI

DELETE `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}`

**Table 5-35** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

#### Request Parameters

**Table 5-36** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

#### Response Parameters

**Status code: 202**

**Table 5-37** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

### URI example

```
DELETE https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02
```

## Example Responses

### Status code: 202

Accepted

```
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.3 Querying Instances and Details

#### Function

This API is used to query instances and details based on specified conditions.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

#### URI

GET [https://{{Endpoint}}/v3/{{project\\_id}}/instances](https://{{Endpoint}}/v3/{{project_id}}/instances)

**Table 5-38** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-39** Query parameters

| Parameter      | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                    |
|----------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id             | No        | String | Instance ID.<br>If you enter an instance ID starting with an asterisk (*), fuzzy search results are returned. If you enter a valid instance ID, an exact result is returned.                                                                                                                                                                   |
| name           | No        | String | Instance name.<br>If you enter an instance name starting with an asterisk (*), fuzzy search results are returned. If you enter a valid instance name, an exact result is returned.                                                                                                                                                             |
| datastore_type | No        | String | Database type. The value can be:<br><b>cassandra</b> , indicating that GeminiDB Cassandra instances are queried.<br><b>mongodb</b> , indicating that GeminiDB Mongo instances are queried.<br><b>influxdb</b> , indicating that GeminiDB Influx instances are queried.<br><b>redis</b> , indicating that GeminiDB Redis instances are queried. |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| mode      | No        | String | <p>Instance type. The value can be:</p> <p><b>Cluster</b>, indicating that the instance is a GeminiDB Cassandra, GeminiDB Influx, or GeminiDB Redis replica set instance.</p> <p><b>InfluxdbSingle</b>, indicating that the instance is a single-node GeminiDB Influx instance.</p> <p><b>ReplicaSet</b>, indicating that the instance is a GeminiDB Mongo replica set instance.</p> <p>The system ignores this parameter if parameter <b>datastore_type</b> is not transferred.</p> |
| vpc_id    | No        | String | <p>VPC ID. You can obtain the value with either of the following methods:</p> <ul style="list-style-type: none"><li>Method 1: Log in to the VPC console and view the VPC ID on the VPC details page.</li><li>Method 2: Query the VPC ID using the VPC API. For details, see <a href="#">Querying VPCs</a>.</li></ul>                                                                                                                                                                 |
| subnet_id | No        | String | <p>Subnet ID. You can obtain the subnet ID with either of the following methods:</p> <ul style="list-style-type: none"><li>Method 1: Log in to the VPC console and click the target subnet on the <b>Subnets</b> page. You can view the network ID on the displayed page.</li><li>Method 2: Query the subnet ID using the VPC API. For details, see <a href="#">Querying Subnets</a>.</li></ul>                                                                                      |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index position. The query starts from the next instance creation time indexed by this parameter under a specified project. If offset is set to <math>N</math>, the resource query starts from the <math>N+1</math> piece of data.</p> <p>The value must be no less than <b>0</b>. If this parameter is not transferred, the index offset is <b>0</b> by default, indicating that the query starts from the latest created instance.</p> |
| limit     | No        | Integer | <p>Maximum number of instances that can be queried.</p> <p>The value ranges from <b>1</b> to <b>100</b>. If this parameter is not transferred, the first 100 instances are queried by default.</p>                                                                                                                                                                                                                                         |

## Request Parameters

**Table 5-40** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-41** Response body parameters

| Parameter   | Type                                                 | Description              |
|-------------|------------------------------------------------------|--------------------------|
| instances   | Array of <a href="#">ListInstancesResult</a> objects | Instance information.    |
| total_count | Integer                                              | Total number of records. |

**Table 5-42** ListInstancesResult

| Parameter    | Type                                                | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id           | String                                              | Instance ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| name         | String                                              | Instance name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| status       | String                                              | Instance status.<br>The value can be: <ul style="list-style-type: none"><li>• <b>normal</b>, indicating that the instance is running normally.</li><li>• <b>abnormal</b>, indicating that the instance is abnormal.</li><li>• <b>creating</b>, indicating that the instance is being created.</li><li>• <b>frozen</b>, indicating that the instance is frozen.</li><li>• <b>data_disk_full</b>, indicating that the instance disk is full.</li><li>• <b>createfail</b>, indicating that the instance failed to be created.</li><li>• <b>enlargefail</b>, indicating that nodes failed to be added to the instance.</li></ul> |
| port         | String                                              | Database port.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| mode         | String                                              | Instance type. This parameter is the same as the corresponding request parameter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| region       | String                                              | Region where the instance is deployed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| datastore    | <a href="#">ListInstancesDatastoreResult</a> object | Database information.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| engine       | String                                              | Storage engine.<br>The value is <b>rocksDB</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| created      | String                                              | Instance creation time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| updated      | String                                              | Time when an instance is updated.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| db_user_name | String                                              | Default username. The value is <b>rwuser</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| vpc_id       | String                                              | VPC ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| subnet_id    | String                                              | Subnet ID.<br>One GeminiDB Cassandra instance may use multiple subnets. For the subnet ID, see <a href="#">Table 5-47</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Parameter             | Type                                                      | Description                                                                                                                                                                                                                 |
|-----------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| security_group_id     | String                                                    | Security group ID.                                                                                                                                                                                                          |
| backup_strategy       | <a href="#">ListInstancesBackupStrategyResult</a> object  | Backup policy.                                                                                                                                                                                                              |
| pay_mode              | String                                                    | Billing mode. Options: <ul style="list-style-type: none"><li>• <b>0</b>: indicates the instance is billed on a pay-per-use basis.</li><li>• <b>1</b>: indicates the instance is billed on a yearly/monthly basis.</li></ul> |
| maintenance_window    | String                                                    | Maintenance time window.                                                                                                                                                                                                    |
| groups                | Array of <a href="#">ListInstancesGroupResult</a> objects | Group information.                                                                                                                                                                                                          |
| enterprise_project_id | String                                                    | Enterprise project ID.<br>If you set this parameter to <b>0</b> , the resource belongs to the <b>default</b> enterprise project.                                                                                            |
| time_zone             | String                                                    | Time zone.                                                                                                                                                                                                                  |
| actions               | Array of strings                                          | Operation that is executed on the instance. Example values: <ul style="list-style-type: none"><li>• <b>CREATE</b></li><li>• <b>REBOOT</b></li><li>• <b>RESTORE</b></li></ul>                                                |
| dedicated_resource_id | String                                                    | Dedicated resource ID. This parameter is returned only when the instance belongs to a dedicated resource pool.                                                                                                              |
| lb_ip_address         | String                                                    | IP address bound to the load balancer. This parameter is returned only when an IP address is specified for the load balancer.                                                                                               |
| lb_port               | String                                                    | Load balancing port number. This parameter is returned only when there is a load balancer address.                                                                                                                          |

**Table 5-43** ListInstancesDatastoreResult

| Parameter | Type   | Description |
|-----------|--------|-------------|
| type      | String | DB API.     |

| Parameter       | Type    | Description                                                                                                                   |
|-----------------|---------|-------------------------------------------------------------------------------------------------------------------------------|
| version         | String  | DB version number.                                                                                                            |
| patch_available | Boolean | Whether there is an available patch for upgrade. If <b>true</b> is returned, you can install a patch to upgrade the instance. |
| whole_version   | String  | Complete database version number. This parameter is available only to GeminiDB Cassandra.                                     |

**Table 5-44** ListInstancesBackupStrategyResult

| Parameter  | Type    | Description                                                                                                             |
|------------|---------|-------------------------------------------------------------------------------------------------------------------------|
| start_time | String  | Backup time window. Automated backup will be triggered during the backup time window. The current time is the UTC time. |
| keep_days  | Integer | Backup retention days. The value ranges from <b>0</b> to <b>35</b> .                                                    |

**Table 5-45** ListInstancesGroupResult

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id        | String | Group ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| status    | String | Group status.<br>The value can be: <ul style="list-style-type: none"><li>• <b>normal</b>, indicating that the group is normal.</li><li>• <b>abnormal</b>, indicating that the group is abnormal.</li><li>• <b>creating</b>, indicating that the group is being created.</li><li>• <b>createfail</b>, indicating that the group failed to be created.</li><li>• <b>deleted</b>: indicating that the group has been deleted.</li><li>• <b>resizefailed</b>: indicating that the group specifications failed to be changed.</li><li>• <b>enlargefail</b>: indicating the group failed to be scaled out.</li></ul> |

| Parameter | Type                                                        | Description         |
|-----------|-------------------------------------------------------------|---------------------|
| volume    | <a href="#">Volume</a> object                               | Volume information. |
| nodes     | Array of<br><a href="#">ListInstancesNodeResult</a> objects | Node information.   |

**Table 5-46** Volume

| Parameter | Type   | Description                |
|-----------|--------|----------------------------|
| size      | String | Storage space in GB.       |
| used      | String | Used storage space, in GB. |

**Table 5-47** ListInstancesNodeResult

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id        | String | Node ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| name      | String | Node name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| status    | String | <p>Node status.<br/>The value can be:</p> <ul style="list-style-type: none"><li>• <b>normal</b>, indicating that the node is running normally.</li><li>• <b>abnormal</b>, indicating that the node is abnormal.</li><li>• <b>creating</b>, indicating that the node is being created.</li><li>• <b>createfail</b>, indicating that the node failed to be created.</li><li>• <b>deleted</b>, indicating that the node has been deleted.</li><li>• <b>resizefailed</b>: indicating that the node specifications failed to be changed.</li><li>• <b>enlargefail</b>: indicating nodes failed to be added.</li></ul> |
| role      | String | <p>Node role.<br/>This parameter is available only for GeminiDB MongoAPI replica set instances.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Parameter         | Type    | Description                                                                                                                                                                                                                                      |
|-------------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subnet_id         | String  | ID of the subnet where the instance node is deployed.                                                                                                                                                                                            |
| private_ip        | String  | Private IP address of the node. This parameter value is available after an ECS is created. Otherwise, the value is "".                                                                                                                           |
| public_ip         | String  | Bound EIP. This parameter is valid only for nodes bound with EIPs.                                                                                                                                                                               |
| spec_code         | String  | Resource specification code. For the code, see the value of parameter <b>flavors.spec_code</b> in <a href="#">Querying Instance Specifications</a> .                                                                                             |
| availability_zone | String  | AZ.                                                                                                                                                                                                                                              |
| support_reduce    | Boolean | Whether instance nodes can be deleted. The value can be: <ul style="list-style-type: none"><li>• <b>true</b>, indicating that instance nodes can be deleted.</li><li>• <b>false</b>, indicating that instance nodes cannot be deleted.</li></ul> |

## Example Requests

- URI example

Querying all instances and details

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0483b6b16e954cb88930a360d2c4e663/instances
```

- URI example

Querying instances and details based on specified conditions

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0483b6b16e954cb88930a360d2c4e663/instances?offset=0&limit=10&id=ed7cc6166ec24360a5ed5c5c9c2ed726in06&name=hy&mode=Cluster&datastore_type=cassandra&vpc_id=19e5d45d-70fd-4a91-87e9-b27e71c9891f&subnet_id=bd51fb45-2dcb-4296-8783-8623bfe89bb7
```

## Example Responses

**Status code: 200**

Success

```
{
 "instances": [{
 "id": "8436a91546294036b75931e879882200in06",
 "name": "nosql-efa6",
 "status": "normal",
 "port": "8635",
 "mode": "Cluster",
 "subnet_id": "bd51fb45-2dcb-4296-8783-8623bfe89bb7",
 "vpc_id": "19e5d45d-70fd-4a91-87e9-b27e71c9891f",
 "spec_code": "cassandra",
 "availability_zone": "ap-southeast-1",
 "public_ip": "10.10.10.10",
 "private_ip": "172.16.1.1",
 "support_reduce": true
 }]
}
```

```
"region" : "aaa",
"datastore" : {
 "type" : "Cassandra",
 "version" : "3.11",
 "whole_version" : "3.11.3.11204",
 "patch_available" : false
},
"engine" : "rocksDB",
"created" : "2019-01-17T07:05:52",
"updated" : "2019-01-17T07:05:47",
"db_user_name" : "rwuser",
"vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",
"subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
"security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",
"backup_strategy" : {
 "start_time" : "16:00-17:00",
 "keep_days" : 7
},
"pay_mode" : 0,
"maintenance_window" : "02:00-06:00",
"groups" : [{
 "id" : "0b0ff12541794e1084f6827e424be2d6gr06",
 "status" : "creating",
 "volume" : {
 "size" : 10,
 "used" : 0.33
 },
 "nodes" : [{
 "id" : "233eaac9c6f245c0bb9c2d21eea12d1bno06",
 "name" : "nosql-efa6_priam_node_1",
 "status" : "normal",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.174",
 "spec_code" : "geminidb.redis.xlarge.4",
 "availability_zone" : "bbb"
 }, {
 "id" : "d57d76d6320a4a7b86db82c317550c4ano06",
 "name" : "nosql-efa6_priam_node_2",
 "status" : "normal",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.175",
 "spec_code" : "geminidb.redis.xlarge.4",
 "availability_zone" : "bbb"
 }, {
 "id" : "f46b0a1cf4d9400e9fd7af17f8742d37no06",
 "name" : "nosql-efa6_priam_node_3",
 "status" : "normal",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.176",
 "spec_code" : "geminidb.redis.xlarge.4",
 "availability_zone" : "bbb"
 }]
}, {
 "enterprise_project_id" : "0",
 "time_zone" : "",
 "actions" : ["CREATE"],
 "lb_ip_address" : "192.168.11.145",
 "lb_port" : "8635"
}, {
 "id" : "1236a91546294036b75931e879882200in02",
 "name" : "nosql-efa7",
 "status" : "normal",
 "port" : "8635",
 "mode" : "ReplicaSet",
 "region" : "aaa",
 "datastore" : {
 "type" : "ReplicaSet",
 "version" : "4.0",
 "patch_available" : false
 }
}
```

```
 },
 "engine" : "rocksDB",
 "created" : "2019-01-17T07:05:52",
 "updated" : "2019-01-17T07:05:47",
 "db_user_name" : "rwuser",
 "vpc_id" : "674e9b42-cd8d-4d25-a2e6-5abcc565b961",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "security_group_id" : "7aa51dbf-5b63-40db-9724-dad3c4828b58",
 "backup_strategy" : {
 "start_time" : "16:00-17:00",
 "keep_days" : 7
 },
 "pay_mode" : 0,
 "maintenance_window" : "02:00-06:00",
 "groups" : [{
 "id" : "0b0ff12541794e1084f6827e424be2d1gr02",
 "status" : "normal",
 "volume" : {
 "size" : 100,
 "used" : 0.003
 },
 "nodes" : [{
 "id" : "233eaac9c6f245c0bb9c2d21eea12d1bno02",
 "name" : "nosql-efa7_replica_node_2",
 "status" : "normal",
 "role" : "Primary",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.174",
 "public_ip" : "10.154.217.134",
 "spec_code" : "geminidb.mongodb.xlarge.4",
 "availability_zone" : "bbb"
 }, {
 "id" : "d57d76d6320a4a7b86db82c317550c4ano02",
 "name" : "nosql-efa7_replica_node_1",
 "status" : "normal",
 "role" : "Secondary",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.39",
 "spec_code" : "geminidb.mongodb.xlarge.4",
 "availability_zone" : "bbb"
 }, {
 "id" : "f46b0a1cf4d9400e9fd7af17f8742d37no02",
 "name" : "nosql-efa7_replica_node_3",
 "status" : "normal",
 "role" : "Secondary",
 "subnet_id" : "f1df08c5-71d1-406a-aff0-de435a51007b",
 "private_ip" : "192.168.0.176",
 "spec_code" : "geminidb.mongodb.xlarge.4",
 "availability_zone" : "bbb"
 }]
 }, {
 "enterprise_project_id" : "0",
 "time_zone" : "",
 "actions" : []
 }],
 "total_count" : 2
 }
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.4 Scaling Up Storage Space of an Instance

### Function

This API is used to scale up storage space of an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

This API supports both yearly/monthly and pay-per-use instances.

Only GeminiDB Cassandra and GeminiDB Influx allow you to restore data of a specified time point from a specified cluster instance to a new cluster instance.

### URI

POST [https://{{Endpoint}}/v3/{{project\\_id}}/instances/{{instance\\_id}}/extend-volume](https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/extend-volume)

**Table 5-48** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-49** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-50** Request body parameters

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| size        | Yes       | Integer | <p>Requested storage space. It must be an integer greater than the current storage space.</p> <p>The maximum storage space depends on the API type and specifications.</p> <ul style="list-style-type: none"><li>For details about GeminiDB Cassandra instances, see <a href="#">Instance Specifications</a>.</li><li>For details about GeminiDB Mongo instances, see <a href="#">Instance Specifications</a>.</li><li>For details about GeminiDB Influx instances, see <a href="#">Instance Specifications</a>.</li><li>For details about GeminiDB Redis instances, see <a href="#">Instance Specifications</a>.</li></ul> |
| is_auto_pay | No        | String  | <p>Whether the order will be automatically paid after a yearly/monthly instance is created. This parameter does not affect the payment mode of automatic renewal.</p> <ul style="list-style-type: none"><li><b>true</b>: indicates that the order is automatically paid from the account.</li><li><b>false</b>: indicates that the order is manually paid from the account. The default value is <b>false</b>.</li></ul>                                                                                                                                                                                                    |

## Response Parameters

Status code: 202

**Table 5-51** Response body parameters

| Parameter | Type   | Description                                                         |
|-----------|--------|---------------------------------------------------------------------|
| job_id    | String | Task ID. This parameter is returned only for pay-per-use instances. |

| Parameter | Type   | Description                                                                          |
|-----------|--------|--------------------------------------------------------------------------------------|
| order_id  | String | Order ID. This parameter is returned only when a yearly/monthly instance is created. |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in06/extend-volume
- Scaling up storage space of an instance to 550 GB  
{  
    "size" : 550  
}

## Example Responses

Status code: 202

Accepted

Example response for a pay-per-use instance:

```
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

Example response for a yearly/monthly instance:

```
{
 "order_id" : "CS20070721568OVO9"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.5 Adding Nodes for an Instance

#### Function

This API is used to add nodes for a specified instance.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo

- GeminiDB Influx
- GeminiDB Redis

The maximum and minimum storage space of each GeminiDB Redis instance depends on its node quantity and specifications. If the new storage space cannot meet the requirements for running the instance, nodes cannot be added.

This API supports both yearly/monthly and pay-per-use instances.

GeminiDB Influx does not allow you to add nodes to single-node instances.

GeminiDB Mongo allows you to add only read-only nodes for instances.

This API can be used to add nodes for two GeminiDB Redis instances between which there is a dual-active DR relationship.

## URI

POST https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/enlarge-node

**Table 5-52** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-53** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-54** Request body parameters

| Parameter | Mandatory | Type    | Description          |
|-----------|-----------|---------|----------------------|
| num       | Yes       | Integer | Number of new nodes. |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| subnet_id   | No        | String | <p>ID of the subnet where the new node is deployed.</p> <ul style="list-style-type: none"><li>• This parameter is transferred only when a new node is added to a GeminiDB Cassandra instance.</li><li>• The transferred subnet ID must belong to the VPC where the current instance is deployed.</li><li>• If this parameter is not transferred, the system will allocate a subnet with sufficient IP addresses for the new node.</li></ul> |
| is_auto_pay | No        | String | <p>Whether the order will be automatically paid after a yearly/monthly instance is created. This parameter does not affect the payment mode of automatic renewal.</p> <ul style="list-style-type: none"><li>• <b>true</b>: indicates that the order is automatically paid from the account.</li><li>• <b>false</b>: indicates that the order is manually paid from the account. The default value is <b>false</b>.</li></ul>                |

## Response Parameters

Status code: 202

**Table 5-55** Response body parameters

| Parameter | Type   | Description                                                             |
|-----------|--------|-------------------------------------------------------------------------|
| job_id    | String | Task ID. This parameter is returned only for pay-per-use instances.     |
| order_id  | String | Order ID. This parameter is returned only for yearly/monthly instances. |

## Example Requests

- URI example
- Adding a node

```
{
 "num" : 1
}
```

## Example Responses

Status code: 202

Accepted

Example response for a pay-per-use instance:

```
{
 "job_id" : "3711e2ad-5787-49bc-a47f-3f0b066af9f5"
}
```

Example response for a yearly/monthly instance:

```
{
 "order_id" : "CS20070721568OVO9"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.6 Deleting Nodes from a Specified Instance

### Function

This API is used to delete nodes from a specified instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra yearly/monthly and pay-per-use instances
- GeminiDB Redis yearly/monthly and pay-per-use instances
- You can change the billing mode of a GeminiDB Mongo instance from yearly/monthly to pay-per-use.

The maximum and minimum storage space of each GeminiDB Redis instance depends on its node quantity and specifications. If the new storage space cannot meet the requirements for running the instance, nodes cannot be removed.

GeminiDB Mongo allows you to delete only read-only nodes from instances.

This API can be used to delete nodes from two GeminiDB Redis instances between which there is a dual-active DR relationship.

## URI

POST [https://{{Endpoint}}/v3/{{project\\_id}}/instances/{{instance\\_id}}/reduce-node](https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/reduce-node)

**Table 5-56** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-57** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-58** Request body parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| num       | No        | Integer | <p>Number of nodes to be deleted randomly.</p> <p>For GeminiDB Cassandra instances, the value ranges from <b>1</b> to <b>10</b>.</p> <p>For GeminiDB Redis instances, the value is <b>1</b>.</p> <p><b>NOTE</b></p> <p>If users connect to nodes using the client, do no choose to delete node randomly.</p> |

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------|-----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| node_list | No        | Array of strings | <p>ID of the node to be deleted. Make sure that the node can be deleted. If this parameter is not transferred, the number of nodes to be deleted is based on the internal policy of the system.</p> <p><b>NOTE</b></p> <ul style="list-style-type: none"><li>Either <b>num</b> or <b>node_list</b> must be set.<ul style="list-style-type: none"><li>If <b>node_list</b> is transferred, its value can contain 1 to 10 characters for GeminiDB Cassandra and contain 1 character for GeminiDB Redis.</li><li>If <b>num</b> and <b>node_list</b> are both transferred, the value of <b>node_list</b> takes effect.</li><li>If <b>node_list</b> is empty, instance nodes are deleted randomly. If <b>node_list</b> is not empty, only the node whose ID is specified is deleted.</li><li>Before a node is deleted, do not connect to the node directly to avoid service interruptions.</li></ul></li></ul> |

## Response Parameters

Status code: 202

**Table 5-59** Response body parameters

| Parameter | Type   | Description                                                             |
|-----------|--------|-------------------------------------------------------------------------|
| job_id    | String | Task ID. This parameter is returned only for pay-per-use instances.     |
| order_id  | String | Order ID. This parameter is returned only for yearly/monthly instances. |

## Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in06/reduce-node
```

- Deleting a node

```
{
 "num": 1,
 "node_list": ["116ba14da34a42d28ecd83a38c218907no12"]
}
```

## Example Responses

**Status code: 202**

Accepted

Example response for a pay-per-use instance:

```
{
 "job_id": "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

Example response for a yearly/monthly instance:

```
{
 "order_id": "CS20070721568OVO9"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.7 Obtaining Sessions of a Node

### Function

This API is used to obtain all sessions of a node.

### Constraints

This API supports GeminiDB Redis instances.

### URI

GET https://{Endpoint}/v3/{project\_id}/redis/nodes/{node\_id}/sessions

**Table 5-60** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| node_id    | Yes       | String | Node ID.                                                                                               |

**Table 5-61** Query parameters

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                   |
|-------------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset      | No        | Integer | Index offset. The value must be no less than <b>0</b> . If this parameter is not transferred, the index offset is <b>0</b> by default, indicating that the query starts from the latest created session to the instance node. |
| limit       | No        | Integer | Number of pages in a pagination query. If this parameter is not transferred, 50 sessions are displayed on each page by default. A maximum of 100 sessions can be displayed.                                                   |
| addr_prefix | No        | String  | Prefix of the address on the user side. It is a character string consisting of an IP address and port number. If this parameter is not transferred, all prefixes of addresses on the user side are queried by default.        |

## Request Parameters

**Table 5-62** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-63** Response body parameters

| Parameter   | Type             | Description                                                      |
|-------------|------------------|------------------------------------------------------------------|
| sessions    | Array of objects | Instance sessions. For details, see <a href="#">Table 5-64</a> . |
| total_count | Integer          | Total sessions that meet search criteria.                        |

**Table 5-64** InstanceSession

| Parameter | Type   | Description                                                        |
|-----------|--------|--------------------------------------------------------------------|
| addr      | String | IP address and port number of the client.                          |
| id        | String | Client ID.                                                         |
| name      | String | Client name, which is specified by running <b>CLIENT SETNAME</b> . |
| cmd       | String | Last executed command.                                             |
| age       | String | Setup duration of the client connection, in seconds.               |
| idle      | String | Idle duration of the client connection, in seconds.                |
| db        | String | ID of the currently accessed database.                             |
| fd        | String | File descriptor for sockets.                                       |
| sub       | String | Number of subscribed channels (Pub/Sub).                           |
| psub      | String | Number of subscribed channels (Pub/Sub) in batches.                |
| multi     | String | Number of commands contained in a MULTI or EXEC transaction.       |

## Example Requests

```
GET https://[Endpoint]/v3/619d3e78f61b4be68bc5aa0b59edcf7b/redis/nodes/784b3fb7bac14bc490659950dd4f022fno12/sessions?offset=0&limit=20&addr_prefix=192.0.0.1:80
```

## Example Responses

**Status code: 200**

Success

```
{
 "total_count": 100,
 "sessions": [{
 "addr": "127.0.0.1:8080",
 "id": "254487",
 "name": "cli",
 "cmd": "get",
 "age": "8888581",
 "idle": "8888581",
 "db": "0",
 "fd": "1311",
 "sub": "0",
 "psub": "0",
 "multi": "-1"
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.8 Querying Session Statistics of an Instance Node

#### Function

This API is used to query session statistics of an instance node.

#### Constraints

This API supports GeminiDB Redis instances.

#### URI

GET https://{{Endpoint}}/v3/{{project\_id}}/redis/nodes/{{node\_id}}/session-statistics

**Table 5-65** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| node_id    | Yes       | String | Node ID.                                                                                               |

#### Request Parameters

**Table 5-66** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

#### Response Parameters

**Status code:** 200

**Table 5-67** Response body parameters

| Parameter               | Type             | Description                                                                                                                                                                            |
|-------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| total_connection_count  | Integer          | Total client connections.                                                                                                                                                              |
| active_connection_count | Integer          | Number of active client connections.                                                                                                                                                   |
| top_source_ips          | Array of objects | Top ten clients with the most connections. Total connected clients and their IP addresses are displayed and ordered based on sessions. For details, see <a href="#">Table 5-68</a> .   |
| top_dbs                 | Array of objects | Top ten databases with the most connections. Total connected clients and their IP addresses are displayed and ordered based on sessions. For details, see <a href="#">Table 5-69</a> . |

**Table 5-68** SourceTopConnection

| Parameter        | Type    | Description                   |
|------------------|---------|-------------------------------|
| client_ip        | String  | Client IP address.            |
| connection_count | Integer | Number of client connections. |

**Table 5-69** TopDbConnection

| Parameter        | Type    | Description                   |
|------------------|---------|-------------------------------|
| db               | String  | GeminiDB Redis database ID.   |
| connection_count | Integer | Number of client connections. |

## Example Requests

```
GET https://[Endpoint]/v3/619d3e78f61b4be68bc5aa0b59edcf7b/redis/nodes/784b3fb7bac14bc490659950dd4f022fno12/session-statistics
```

## Example Responses

**Status code: 200**

Success

```
{
 "total_connection_count": 10,
 "active_connection_count": 5,
 "top_source_ips": [{
```

```
"client_ip" : "127.0.0.1",
"connection_count" : 10
}, {
"client_ip" : "192.10.14.1",
"connection_count" : 9
}],
"top_dbs" : [{
"db" : "12",
"connection_count" : 10
}, {
"db" : "14",
"connection_count" : 8
}]
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.9 Closing Sessions of an Instance Node

#### Function

This API is used to close sessions of an instance node.

#### Constraints

This API supports GeminiDB Redis instances and can be used to close inactive sessions of an instance node.

#### URI

DELETE [https://{{Endpoint}}/v3/{{project\\_id}}/redis/nodes/{{node\\_id}}/sessions](https://{{Endpoint}}/v3/{{project_id}}/redis/nodes/{{node_id}}/sessions)

**Table 5-70** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| node_id    | Yes       | String | Node ID.                                                                                               |

## Request Parameters

**Table 5-71** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-72** Request body parameters

| Parameter   | Mandatory | Type             | Description                                                                                                            |
|-------------|-----------|------------------|------------------------------------------------------------------------------------------------------------------------|
| is_all      | Yes       | Boolean          | Whether all sessions are closed.                                                                                       |
| session_ids | No        | Array of strings | ID of the session to be closed. When the value of <b>is_all</b> is <b>false</b> , this parameter cannot be left empty. |

## Response Parameters

**Status code: 200**

No response parameters

## Example Requests

- URI example  
DELETE https://{Endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/redis/nodes/784b3fb7bac14bc490659950dd4f022fno12/sessions
- Deleting sessions **1131** and **2323**  
{  
    "is\_all": false,  
    "session\_ids": [ "1131", "2323" ]  
}

## Example Responses

**Status code: 200**

Success

{ }

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.10 Querying Specifications That You Can Change Those of an Instance To

### Function

This API is used to query specifications that you can change those of an instance to.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

### URI

GET `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/available-flavors`

**Table 5-73** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-74** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                      |
|-----------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <ul style="list-style-type: none"><li>• The query starts from the next piece of data indexed by this parameter. The value is <b>0</b> by default.</li><li>• The value must be a positive integer.</li></ul> |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                  |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | Maximum records to be queried. <ul style="list-style-type: none"><li>• The value ranges from <b>1</b> to <b>100</b>.</li><li>• If this parameter is not transferred, the first 100 records are queried by default.</li></ul> |

## Request Parameters

**Table 5-75** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-76** Response body parameters

| Parameter        | Type                                      | Description                                                                         |
|------------------|-------------------------------------------|-------------------------------------------------------------------------------------|
| instance_id      | String                                    | Instance ID.                                                                        |
| instance_name    | String                                    | Instance name.                                                                      |
| current_flavor   | <a href="#">ComputeFlavor</a> object      | Instance specifications.                                                            |
| optional_flavors | <a href="#">OptionalFlavorInfo</a> object | Available specification options that the instance specifications can be changed to. |

**Table 5-77** ComputeFlavor

| Parameter | Type   | Description         |
|-----------|--------|---------------------|
| vcpus     | String | Number of vCPUs.    |
| ram       | String | Memory size in GB.  |
| spec_code | String | Specification code. |

| Parameter     | Type                | Description    |
|---------------|---------------------|----------------|
| az_status     | Map<String, String> | AZ status.     |
| region_status | String              | Region status. |

**Table 5-78** OptionalFlavorsInfo

| Parameter   | Type                                 | Description                                                                         |
|-------------|--------------------------------------|-------------------------------------------------------------------------------------|
| list        | Array of <b>ComputeFlavor</b> object | Available specification options that the instance specifications can be changed to. |
| total_count | Integer                              | Total number of records.                                                            |

## Example Requests

- URI example  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/094424666ef04f79a2dfbe9f5b8b31a5in06/available-flavors
- Example request body  
None

## Example Responses

### Status code: 200

Success

```
{
 "instance_id": "094424666ef04f79a2dfbe9f5b8b31a5in06",
 "instance_name": "geminidb_instance_noreuse_0_ZKv2FSkxgoc3F8bGzsaxNg",
 "current_flavor": {
 "vcpus": "4",
 "ram": "16",
 "spec_code": "geminidb.cassandra.xlarge.4",
 "az_status": {
 "az2***": "unknown",
 "az1***": "normal",
 "az3***": "unknown"
 },
 "region_status": null
 },
 "optional_flavors": {
 "list": [{
 "vcpus": "2",
 "ram": "8",
 "spec_code": "geminidb.cassandra.large.4",
 "az_status": {
 "az2***": "unknown",
 "az1***": "normal",
 "az4***": "normal",
 "az3***": "unknown"
 },
 "region_status": "normal"
 }]
 }
}
```

```
 },
 "vcpus" : "8",
 "ram" : "32",
 "spec_code" : "geminidb.cassandra.2xlarge.4",
 "az_status" : {
 "az2***" : "unknown",
 "az1***" : "normal",
 "az3***" : "unknown"
 },
 "region_status" : "normal"
 },
 {
 "vcpus" : "16",
 "ram" : "64",
 "spec_code" : "geminidb.cassandra.4xlarge.4",
 "az_status" : {
 "az2***" : "unknown",
 "az1***" : "normal",
 "az3***" : "unknown"
 },
 "region_status" : "normal"
 },
 {
 "vcpus" : "32",
 "ram" : "128",
 "spec_code" : "geminidb.cassandra.8xlarge.4",
 "az_status" : {
 "az2***" : "unknown",
 "az1***" : "normal",
 "az3***" : "unknown"
 },
 "region_status" : "normal"
 }
],
"total_count": 4
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.11 Changing Specifications of an Instance

#### Function

This API is used to change specifications of an instance.



Services will be interrupted for 5 to 10 minutes when you change specifications of an instance. Exercise caution when performing this operation.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Redis

This API supports both yearly/monthly and pay-per-use instances.

This API can be used to scale up or down specifications of an instance.  
The new specifications cannot be the same as the original specifications.  
Specifications can be modified only when the instance status is **normal**.  
If specifications cannot meet the requirements for running the instance, the specifications cannot be changed.  
This API can be used to change specifications for two GeminiDB Redis instances between which there is a dual-active DR relationship.

## URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/resize

**Table 5-79** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-80** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-81** Request body parameters

| Parameter | Mandatory | Type                                        | Description                       |
|-----------|-----------|---------------------------------------------|-----------------------------------|
| resize    | Yes       | <a href="#">ResizeInstanceOption object</a> | Target specification information. |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| is_auto_pay | No        | String | <p>Whether the order will be automatically paid after a yearly/monthly instance is created. This parameter does not affect the payment mode of automatic renewal.</p> <ul style="list-style-type: none"><li>• This parameter is invalid when the instance specifications are scaled down.</li><li>• When the specifications are scaled up, this parameter can be set to:<ul style="list-style-type: none"><li>– <b>true</b>, indicating that the order is automatically paid from the account.</li><li>– <b>false</b>, indicating that the order is manually paid from the account. The default value is <b>false</b>.</li></ul></li></ul> |

**Table 5-82** ResizeInstanceOption

| Parameter        | Mandatory | Type   | Description                                                                                                                                                                       |
|------------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| target_spec_code | Yes       | String | <p>Target resource specification code.</p> <p>For the code, see the value of response parameter <b>flavors.spec_code</b> in <a href="#">Querying Instance Specifications</a>.</p> |

## Response Parameters

Status code: 202

**Table 5-83** Response body parameters

| Parameter | Type   | Description                                                             |
|-----------|--------|-------------------------------------------------------------------------|
| job_id    | String | Task ID. This parameter is returned only for pay-per-use instances.     |
| order_id  | String | Order ID. This parameter is returned only for yearly/monthly instances. |

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in06/resize
- Changing instance specifications to 16 vCPUs | 64 GB  
{  
  "resize": {  
    "target\_spec\_code": "geminidb.cassandra.4xlarge.4"  
  }  
}

## Example Responses

Status code: 202

Accepted

Example response for a pay-per-use instance:

```
{
 "job_id": "3711e2ad-5787-49bc-a47f-3f0b066af9f5"
}
```

Example response for a yearly/monthly instance:

```
{
 "order_id": "CS20070721568OVO9"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.12 Resetting the Administrator Password of an Instance

#### Function

This API is used to reset the administrator password of an instance.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

This operation cannot be performed on frozen or abnormal instances.

Abnormal instances do not support this operation.

Only the password of user **rwuser** can be reset.

## URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/password

**Table 5-84** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-85** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-86** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| password  | Yes       | String | <p>Database password.</p> <p>The password can include 8 to 32 characters and contain uppercase letters, lowercase letters, digits, and a combination of any two of the following special characters: ~!@#%^*-_=+? The password of GeminiDB Redis instances can contain at least two types of the following characters: uppercase letters, lowercase letters, digits, and special characters (~!@#\$%^&amp;*()_-=+?).</p> <p>Enter a strong password against security risks such as brute force cracking.</p> |

## Response Parameters

**Status code: 204**

No response parameters

## Example Requests

- **URI example**  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in06/password

- Resetting the administrator password of an instance to \*\*\*\*\*  
{  
    "password" : "\*\*\*\*\*"  
}

## Example Responses

**Status code: 204**

No Content

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.13 Editing the Name of an Instance

### Function

This API is used to edit the name of an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

The name of the instance that is being created or fails to be created cannot be edited.

### URI

PUT https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/name

**Table 5-87** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-88** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-89** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                     |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | Yes       | String | New instance name.<br>The name:<br>Must start with a letter and can include 4 to 64 characters.<br>It is case-sensitive and can contain only letters, digits, hyphens (-), and underscores (_). |

## Response Parameters

**Status code: 204**

No response parameters

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fd405ea4674276ce36dae8in06/name
- Changing the instance name to **myNewName**

```
{
 "name" : "myNewName"
}
```

## Example Responses

None

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.14 Changing the Security Group of an Instance

### Function

This API is used to change the security group associated with an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

Abnormal instances do not support this operation.

Please confirm the modified security group rule. This policy may affect connections to the current instance, interrupting services.

### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/security-group

**Table 5-90** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-91** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-92** Request body parameters

| Parameter         | Mandatory | Type   | Description                   |
|-------------------|-----------|--------|-------------------------------|
| security_group_id | Yes       | String | ID of the new security group. |

## Response Parameters

**Status code: 204**

**Table 5-93** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example

```
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/security-group
```

- Example request body

```
{
 "security_group_id" : "73bed21a-708b-4985-b697-a96d0e0d2b39"
}
```

## Example Responses

**Status code: 204**

No Content

```
{
 "job_id" : "3711e2ad-5787-49bc-a47f-3f0b066af9f5"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.15 Upgrading Minor Version

#### Function

This API is used to upgrade the minor version of an instance.

#### Constraints

- This API supports the following types of instances:
  - GeminiDB Cassandra
  - GeminiDB Influx
  - GeminiDB Redis
- This API is not available to frozen or abnormal instances.
- This API is not available if there are abnormal instance nodes.
- View field **patch\_available** in the result returned by the API for querying instance details and check whether a minor version upgrade is supported.
- Perform an upgrade during off-peak hours.

#### URI

POST `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/db-upgrade`

**Table 5-94** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

#### Request Parameters

**Table 5-95** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

#### Response Parameters

**Status code: 202**

**Table 5-96** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein02/db-upgrade
```

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id" : "3711e2ad-5787-49bc-a47f-3f0b066af9f5"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.16 Creating Cold Storage

### Function

This API is used to create cold storage for an instance.

### Constraints

This API supports only GeminiDB Influx cluster and GeminiDB Influx single-node instances.

This API supports both yearly/monthly and pay-per-use instances.

### URI

```
POST https://{Endpoint}/v3/{project_id}/instances/{instance_id}/cold-volume
```

**Table 5-97** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-98** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-99** Request body parameters

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| size        | Yes       | Integer | Size in GB of the cold storage to be created.<br>The minimum cold storage is 500 GB, and the maximum is 100,000 GB.                                                                                                                                                                                                                                                                                                                                                 |
| is_auto_pay | No        | String  | Whether the order is paid automatically from your account when you buy cold storage for a yearly/monthly instance. This parameter does not affect the payment mode of automatic renewal. The value can be: <ul style="list-style-type: none"><li>• <b>true</b>, indicating that the order is automatically paid from the account.</li><li>• <b>false</b>, indicating that the order is manually paid from the account. The default value is <b>false</b>.</li></ul> |

## Response Parameters

Status code: 202

**Table 5-100** Response body parameters

| Parameter | Type   | Description                                                                                          |
|-----------|--------|------------------------------------------------------------------------------------------------------|
| job_id    | String | Task ID.                                                                                             |
| order_id  | String | Order ID. This parameter is returned only when cold storage is created for yearly/monthly instances. |

## Example Requests

- URI example  
POST `https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/4d77eb5d9b9d407d88bbeba254b81aa0in13/cold-volume`

- Creating 500 GB of cold storage  
`{ "size" : 500 }`

## Example Responses

**Status code: 202**

Accepted

```
{ "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae" }
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.17 Scaling Up Cold Storage

### Function

This API is used to scale up cold storage of an instance.

### Constraints

This API supports only GeminiDB Influx cluster and GeminiDB Influx single-node instances.

This API supports both yearly/monthly and pay-per-use instances.

### URI

`PUT https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/cold-volume`

**Table 5-101** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                          |
|-------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                         |

## Request Parameters

**Table 5-102** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-103** Request body parameters

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| size        | Yes       | Integer | <p>Size in GB of the new cold storage.</p> <ul style="list-style-type: none"><li>• You can increase cold storage in increments of 1 GB and ensure that the new cold storage is an integer.</li><li>• The maximum cold storage can be up to 100,000 GB.</li></ul>                                                                                                                                                                                                                 |
| is_auto_pay | No        | String  | <p>Whether the order can be paid automatically from your account when you scale up cold storage of your instance. This parameter does not affect the payment mode of automatic renewal. The parameter value can be:</p> <ul style="list-style-type: none"><li>• <b>true</b>, indicating that the order is automatically paid from the account.</li><li>• <b>false</b>, indicating that the order is manually paid from the account. The default value is <b>false</b>.</li></ul> |

## Response Parameters

**Status code: 202**

**Table 5-104** Response body parameters

| Parameter | Type   | Description                                                                                             |
|-----------|--------|---------------------------------------------------------------------------------------------------------|
| job_id    | String | Task ID.                                                                                                |
| order_id  | String | Order ID. This parameter is returned only when storage space of a yearly/monthly instance is scaled up. |

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/944bcd55da6c4b33b260b34185ac86bein13/cold-volume
- Scaling up cold data storage space of an instance to 1,000 GB  
{  
    "size" : 1000  
}

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.18 Binding/Unbinding an EIP

### Function

This API is used to bind an EIP to a node of an instance or unbind an EIP from the node.

### Constraints

- This API supports the following types of instances:
  - GeminiDB Cassandra

- GeminiDB Mongo
  - GeminiDB Influx
  - GeminiDB Redis
- This API is not available to frozen or abnormal instances.
  - Multiple EIPs cannot be bound to the same node.
  - Unbinding an EIP from a node of a frozen instance is not supported.
  - Unbinding an EIP from a node with no EIPs bound is not supported.

## URI

POST https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/nodes/{{node\_id}}/public-ip

**Table 5-105** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |
| node_id     | Yes       | String | Instance node ID.                                                                                      |

## Request Parameters

**Table 5-106** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-107** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                            |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String | Operation identifier.<br>The value can be: <ul style="list-style-type: none"><li>● <b>BIND</b>, indicating that an EIP is bound.</li><li>● <b>UNBIND</b>, indicating that an EIP is unbound.</li></ul> |
| public_ip | No        | String | EIP. This parameter is mandatory when an EIP needs to be bound.                                                                                                                                        |

| Parameter    | Mandatory | Type   | Description                                                        |
|--------------|-----------|--------|--------------------------------------------------------------------|
| public_ip_id | No        | String | EIP ID. This parameter is mandatory when an EIP needs to be bound. |

## Response Parameters

**Status code: 202**

**Table 5-108** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- Binding an EIP
  - URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61f554065802400c9c33f87e8114f081in10/nodes/1345bb07d1834f8fb0b4acbc26e989aano10/public-ip
```
  - Example request body

```
{
 "action": "BIND",
 "public_ip": "10.154.218.161",
 "public_ip_id": "45da4782-e0c8-4aa4-a290-b8740014f710"
}
```
- Unbinding an EIP
  - URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61f554065802400c9c33f87e8114f081in10/nodes/1345bb07d1834f8fb0b4acbc26e989aano10/public-ip
```
  - Example request body

```
{
 "action": "UNBIND",
 "public_ip": "10.154.218.161"
}
```

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id": "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.19 Enabling or Disabling SSL

### Function

This API is used to enable or disable SSL.

### Constraints

- This API supports the following types of instances:
  - GeminiDB Mongo
  - GeminiDB Influx
  - GeminiDB Redis
- Enabling or disabling SSL is not supported for frozen or abnormal instances.
- The instance will be restarted after SSL is enabled or disabled on it. Exercise caution when you enable or disable SSL.

### URI

POST https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/ssl-option

**Table 5-109** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                          |
|-------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                         |

### Request Parameters

**Table 5-110** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-111** Request body parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                            |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ssl_option | Yes       | String | Whether SSL is enabled. The value can be: <ul style="list-style-type: none"><li>• <b>on</b>, indicating that SSL is enabled by default.</li><li>• <b>off</b>, indicating that SSL is not enabled by default.</li></ul> |

## Response Parameters

**Status code: 202**

**Table 5-112** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- Enabling SSL

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/944bdc55da6c4b33b260b34185ac86bein13/ssl-option
```

- Enabling SSL

```
{
 "ssl_option" : "on"
}
```

- Disabling SSL

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/944bdc55da6c4b33b260b34185ac86bein13/ssl-option
```

- Disabling SSL

```
{
 "ssl_option" : "off"
}
```

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.20 Restarting an Instance

### Function

This API is used to restart an instance.

### Constraints

- This API supports the following types of instances:
  - GeminiDB Cassandra
  - GeminiDB Mongo
  - GeminiDB Influx
  - GeminiDB Redis
- If the instance status is not normal, the instance cannot be restarted.

### URI

POST https://[{Endpoint}](#)/v3/{project\_id}/instances/{instance\_id}/restart

**Table 5-113** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                          |
|-------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                         |

### Request Parameters

**Table 5-114** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

### Response Parameters

**Status code: 202**

**Table 5-115** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/944bdc55da6c4b33b260b34185ac86bein13/restart
```

- Example request body

```
{}
```

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.21 Configuring an Autoscaling Policy for Storage Space

#### Function

This API is used to configure an autoscaling policy for storage space.

#### Constraints

- This API supports GeminiDB Cassandra and GeminiDB Redis instances.
- This API supports both pay-per-use and yearly/monthly instances.
- For yearly/monthly instances, the system bills new storage space automatically by default.
- Autoscaling is available only when your account balance is sufficient.
- If the instance status is not normal, autoscaling of storage space cannot be configured.

#### URI

```
PUT https://{{Endpoint}}/v3/{{project_id}}/instances/disk-auto-expansion
```

**Table 5-116** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-117** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-118** Request body parameters

| Parameter     | Mandatory | Type                                             | Description                                                                                                                                                                                                                                                                                |
|---------------|-----------|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_ids  | Yes       | Array of strings                                 | IDs of the instances where autoscaling is enabled for storage space. Up to 50 instances are supported.                                                                                                                                                                                     |
| switch_option | No        | String                                           | Whether autoscaling is enabled. The value can be: <ul style="list-style-type: none"><li>• <b>on</b>, indicating that autoscaling is enabled for storage space.</li><li>• <b>off</b>, indicating that autoscaling is disabled for storage space.</li></ul> The default value is <b>on</b> . |
| policy        | No        | Array of <a href="#">diskAutoExpansionPolicy</a> | Autoscaling policies for storage space.                                                                                                                                                                                                                                                    |

**Table 5-119** diskAutoExpansionPolicy

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| threshold | No        | Integer | <p>Threshold for triggering autoscaling.</p> <ul style="list-style-type: none"><li>● GeminiDB Cassandra instances<ul style="list-style-type: none"><li>– The value can be <b>80</b>, <b>85</b>, or <b>90</b>.</li><li>– The default threshold is <b>90</b>, indicating that autoscaling is enabled when the used storage space exceeds 90% of total storage space or the available storage space is less than 10 GB.</li></ul></li><li>● GeminiDB Redis instances<ul style="list-style-type: none"><li>– The value can be <b>60</b>, <b>65</b>, <b>70</b>, <b>75</b>, <b>80</b>, <b>85</b>, and <b>90</b>.</li><li>– The default threshold is <b>80</b>, indicating that autoscaling is enabled when the used storage space exceeds 80% of total storage space.</li></ul></li></ul> |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| step      | No        | Integer | <p>Autoscaling step (s%).</p> <ul style="list-style-type: none"><li>• GeminiDB Cassandra instances<ul style="list-style-type: none"><li>– The value can be <b>10</b>, <b>15</b>, or <b>20</b>, and the default value is <b>10</b>.</li><li>– After autoscaling is enabled, storage space will increase by s% automatically.</li></ul></li><li>• GeminiDB Redis instances<ul style="list-style-type: none"><li>– The value can be <b>10</b>, <b>15</b>, or <b>20</b>, and the default value is <b>20</b>.</li><li>– When the storage usage is greater than 98%: If the total storage is less than 600 GB, the storage usage after autoscaling (used storage space/total storage space) will be less than 85%. If the total storage is greater than or equal to 600 GB, the system automatically scales up the storage space by over 90 GB.</li></ul></li></ul> |

**NOTE**

- GeminiDB Cassandra instances
  - If the autoscaling step is not a multiple of 10, round it up.
  - The value after the decimal point is rounded. The minimum step is 100 GB by default.
- GeminiDB Redis instances
  - The value after the decimal point is rounded. The minimum step is 1 GB by default.
  - If there is insufficient balance in your account, storage space may fail to be scaled up for yearly/monthly instances.

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| size      | No        | Integer | <p>Storage limit in GB that autoscaling can increase storage space to.</p> <ul style="list-style-type: none"><li>● GeminiDB Cassandra instances<ul style="list-style-type: none"><li>- The lower limit must be no less than instance storage space plus 100 GB, and the upper limit cannot exceed the maximum storage space defined by your instance specifications.</li><li>- Batch autoscaling does not allow you to specify an upper storage limit. The upper limit is the maximum storage defined by your instance specifications by default.</li></ul></li><li>● GeminiDB Redis instances<ul style="list-style-type: none"><li>- Autoscaling does not allow you to specify an upper storage limit. The upper limit is the maximum storage defined by your instance specifications by default.</li></ul></li></ul> |

## Response Parameters

**Status code: 204**

No response parameters

## Example Requests

- Enabling the autoscaling policy of storage space
  - URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/disk-auto-expansion
```
  - Enabling autoscaling for storage space (Set **threshold** to **90**, **step** to **10**, and **size** to **600**.)

```
{ "instance_ids" : ["93e4b3eda14349b1b870f72829bc3b9bin06"], "policy" : { "threshold" : 90, "step" : 10, "size" : 600 }}
```

```
}
```

- Disabling the autoscaling policy of storage space

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/disk-auto-expansion
```

- Disabling the autoscaling policy of storage space

```
{
 "instance_ids": ["93e4b3eda14349b1b870f72829bc3b9bin06"],
 "switch_option": "off"
}
```

## Example Responses

**Status code: 204**

No Content

```
{}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.22 Checking Password Strength

#### Function

This API is used to check whether the password is weak.

#### URI

```
POST https://{Endpoint}/v3/{project_id}/weak-password-verification
```

**Table 5-120** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-121** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-122** Request body parameters

| Parameter | Mandatory | Type   | Description        |
|-----------|-----------|--------|--------------------|
| password  | Yes       | String | Database password. |

## Response Parameters

**Status code: 200**

**Table 5-123** Response body parameters

| Parameter | Type    | Description                                                                                                                                                                       |
|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| weak      | Boolean | Whether the password is a weak password. <ul style="list-style-type: none"><li>• <b>true</b>: It is a weak password.</li><li>• <b>false</b>: It is not a weak password.</li></ul> |

## Example Requests

- **URI example**  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/weak-password-verification
- **Checking Password Strength**  
{  
    "password" : "xxxx"  
}

## Example Responses

**Status code: 200**

Success

```
{
 "weak" : false
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.3.23 Changing a Database Port

#### Function

This API is used to change the database port of an instance.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Redis

This operation is not supported for frozen or abnormal instances.

GeminiDB Redis and GeminiDB Cassandra do not allow you to change the database port of a DR instance. To change the database port, you have to change the port of the primary instance first. The load balancer port of a GeminiDB Redis instance is changed accordingly.

The instance must be restarted to make changes take effect. Exercise caution when modifying the database port.

#### URI

PUT [https://{{Endpoint}}/v3/{{project\\_id}}/instances/{{instance\\_id}}/port](https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/port)

**Table 5-124** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> .                                                                                                                                 |
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

## Request Parameters

**Table 5-125** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-126** Request body parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| port      | Yes       | Integer | New database port number.<br>The database port number of GeminiDB Mongo replica sets 4.0 ranges from 2100 to 9500, except 8636, 8637, and 8638.<br>The database port number of GeminiDB Cassandra instances ranges from 2100 to 9500, except 7000, 7001, 7199, 8636, 8479, 8484, 8999, 8018, 2180, 2887, 3887, 8079, 8091, and 8092.<br>The database port number of GeminiDB Redis instances ranges from 1024 to 65535, except 2180, 2887, 3887, 6377, 6378, 6380, 8018, 8079, 8091, 8479, 8484, 8999, 12017, 12333 and 50069. |

## Response Parameters

Status code: 202

**Table 5-127** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example

```
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/c865f921f3dd45198f209a607533a779in06/port
```

- Changing the database port number to 8888

```
{
 "port" : 8888
}
```

## Example Responses

### Status code: 202

Accepted

```
{
 "job_id" : "89638f5e-0780-497c-b3c0-4d0968383e19"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.24 Configuring Access to a Replica Set Across CIDR Blocks

### Function

This API is used to configure access to a replica set across CIDR blocks.

### Constraints

This API supports the following types of instances:

- GeminiDB Mongo

This operation is not supported for frozen or abnormal instances.

### URI

POST https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/client-network

**Table 5-128** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

## Request Parameters

**Table 5-129** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-130** Request body parameters

| Parameter             | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------|-----------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| client_network_ranges | Yes       | Array of strings | <p>CIDR block where the client is located.</p> <ul style="list-style-type: none"><li>Access across CIDR blocks is required only when the CIDR blocks of the client and the replica set instance are different. For example, if the client CIDR block is 192.168.0.0/16 and the replica set instance's CIDR block is 172.16.0.0/24, add the CIDR block 192.168.0.0/16 so that the client can access the replica set instance.</li><li>For example, if the source network segment is 192.168.0.0/xx, the value of xx must range from <b>8</b> to <b>32</b>.</li><li>To ensure the ECS and the instance can communicate with each other, configure the connection by referring to <a href="#">VPC Peering Connection Overview</a>.</li></ul> |

## Response Parameters

**Status code: 202**

**Table 5-131** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/9136fd2a9fcd405ea4674276ce36dae8in10/client-network
- Changing the CIDR block where the client is located to 192.168.0.0/16  
{  
    "client\_network\_ranges" : [ "192.168.0.0/16" ]  
}

## Example Responses

**Status code: 202**

Accepted

```
{
 "job_id" : "89638f5e-0780-497c-b3c0-4d0968383e19"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.25 Deleting the Node that Fails to Be Added

### Function

This API is used to delete the node that fails to be added to an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo

- GeminiDB Redis

## URI

DELETE https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/enlarge-failed-nodes

**Table 5-132** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> .                                                                                                                                 |
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

## Request Parameters

**Table 5-133** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-134** Request body parameters

| Parameter | Mandatory | Type   | Description |
|-----------|-----------|--------|-------------|
| node_id   | Yes       | String | Node ID.    |

## Response Parameters

Status code: 202

**Table 5-135** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example

```
DELETE https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/c865f921f3dd45198f209a607533a779in06/enlarge-failed-nodes
```

- Example request body

```
{
 "node_id" : "b60f00f19cd044fc8d7b52908978f629no06"
}
```

## Example Responses

Status code: 202

Accepted

```
{
 "job_id" : "89638f5e-0780-497c-b3c0-4d0968383e19"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.26 Querying IP Addresses Required for Creating an Instance or Adding Nodes

### Function

This API is used to query IP addresses required for creating an instance or adding nodes to an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

### URI

GET https://{{Endpoint}}/v3/{{project\_id}}/ip-num-requirement

**Table 5-136** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-137** Query parameters

| Parameter     | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| node_num      | Yes       | Integer | Nodes required for creating or scaling out an instance. The maximum value is <b>200</b> .                                                                                                                                                                                                                                                                                                              |
| engine_name   | No        | String  | DB API name. If no instance ID is transferred, this parameter is mandatory. The value can be: <ul style="list-style-type: none"><li>• <b>cassandra</b>, indicating GeminiDB Cassandra API.</li><li>• <b>mongodb</b>, indicating GeminiDB Mongo API</li><li>• <b>influxdb</b>, indicating GeminiDB Influx API.</li><li>• <b>redis</b>, indicating GeminiDB Redis API.</li></ul>                         |
| instance_mode | No        | String  | Instance type. The value can be: If no instance ID is transferred, this parameter is mandatory. The value can be: <ul style="list-style-type: none"><li>• <b>Cluster</b>, indicating that the instance is a GeminiDB Cassandra, GeminiDB Influx, or GeminiDB Redis replica set instance.</li><li>• <b>ReplicaSet</b>, indicating that the instance is a GeminiDB Mongo replica set instance.</li></ul> |
| instance_id   | No        | String  | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one.                                                                                                                                                                 |

## Request Parameters

**Table 5-138** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-139** Response body parameters

| Parameter | Type    | Description                  |
|-----------|---------|------------------------------|
| count     | Integer | Number of IP addresses used. |

## Example Requests

- URI example  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/ip-num-requirement?node\_num=3&engine\_name=cassandra&instance\_mode=Cluster
- Example request body  
None

## Example Responses

**Status code: 200**

Success

```
{
 "count" : 3
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.27 Configuring the Autoscaling Policy of Storage Space

### Function

This API is used to query the autoscaling policy of storage space.

## Constraints

This API supports the following types of instances:

- GeminiDB Cassandra

## URI

GET https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/disk-auto-expansion

**Table 5-140** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> .                                                                                                                                 |
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

## Request Parameters

**Table 5-141** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-142** Response body parameters

| Parameter | Type   | Description                                                                                                                                                  |
|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| policy    | object | Autoscaling policy for storage space.<br>No information is returned if the autoscaling policy is disabled.<br>For details, see <a href="#">Table 5-143</a> . |

**Table 5-143** AutoEnlargePolicy

| Parameter | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| threshold | Integer | Threshold for triggering autoscaling.                                                                                                                                                                                                                                                                                                                                                                                                                               |
| step      | Integer | Percentage increase (step%). When autoscaling is triggered, the database system automatically scales up the current storage space of your instance by step%. If the increased storage space is not a multiple of 10 GB, the system rounds it up to the nearest multiple of 10 GB. The default minimum increment is 100 GB.<br><b>NOTE</b><br>If there is insufficient balance in your account, storage space may fail to be scaled up for yearly/monthly instances. |
| size      | Integer | Storage limit in GB that autoscaling can increase storage space to.                                                                                                                                                                                                                                                                                                                                                                                                 |

## Example Requests

- URI example  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/93e4b3eda14349b1b870f72829bc3b9bin06/disk-auto-expansion
- Example request body  
None

## Example Responses

### Status code: 200

Success

```
{
 "policy": {
 "threshold": 90,
 "step": 10,
 "size": 600
 }
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.3.28 Scaling Storage Space of an Instance

### Function

This API is used to scale storage space of an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Redis

This API supports both yearly/monthly and pay-per-use instances.

### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/volume

**Table 5-144** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-145** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-146** Request body parameters

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| size        | Yes       | Integer | <p>Requested storage space, in GB. The value must be an integer. When you want to scale up storage space, the requested storage value must be greater than the current storage. When you scale down storage space, make sure that new storage space is 25% more than the used space and rounded up. The maximum and minimum storage space depends on the API type and specifications.</p> <ul style="list-style-type: none"><li>For details about GeminiDB Cassandra instances, see <a href="#">Instance Specifications</a>.</li><li>For details about GeminiDB Redis instances, see <a href="#">Instance Specification</a>.</li></ul> |
| is_auto_pay | No        | Boolean | <p>Whether the order is automatically paid from your account when you scale up the storage of a yearly/monthly instance. This parameter does not affect the payment mode of automatic renewal.</p> <ul style="list-style-type: none"><li><b>true</b>: indicates that the order is automatically paid from the account.</li><li><b>false</b>: indicates that the order is manually paid from the account. The default value is <b>false</b>.</li></ul>                                                                                                                                                                                  |

## Response Parameters

Status code: 200

**Table 5-147** Response body parameters

| Parameter | Type   | Description                                                                          |
|-----------|--------|--------------------------------------------------------------------------------------|
| job_id    | String | Task ID. This parameter is returned only for pay-per-use instances.                  |
| order_id  | String | Order ID. This parameter is returned only when a yearly/monthly instance is created. |

## Example Requests

- **URI example**  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/volume
- **Changing storage space of an instance to 550 GB**  
{  
    "size" : 550  
}

## Example Responses

### Status code: 200

Success

Example response for a pay-per-use instance:

```
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

Example response for a yearly/monthly instance:

```
{
 "order_id" : "CS20070721568OVO9"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4 Backups and Restorations

### 5.4.1 Querying Backups

#### Function

This API is used to query backups based on specified conditions.

GeminiDB Cassandra only allows you to view incremental backups and differential backups and their sizes.

## URI

GET https://{{Endpoint}}/v3/{{project\_id}}/backups

**Table 5-148** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                          |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-149** Query parameters

| Parameter      | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                    |
|----------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset         | Yes       | Integer | Page number.<br>Minimum value: <b>1</b>                                                                                                                                                                                                                                                                                                        |
| limit          | Yes       | Integer | Number of records on each page.<br>Minimum value: <b>1</b><br>Maximum value: <b>100</b>                                                                                                                                                                                                                                                        |
| datastore_type | No        | String  | DB API type. If this parameter is not specified, all DB API will be queried.<br>Value options: <ul style="list-style-type: none"><li>• cassandra</li><li>• mongodb</li><li>• redis</li><li>• influxdb</li></ul>                                                                                                                                |
| type           | No        | String  | Backup policy type. The value can be: <ul style="list-style-type: none"><li>• <b>Instance</b>, indicating that an instance backup is queried.</li><li>• <b>DatabaseTable</b>, indicating that a table-level backup is queried. This feature is available to only GeminiDB Cassandra.</li><li>• The default value is <b>Instance</b>.</li></ul> |

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id | No        | String | Instance ID. If this parameter is not transferred, all backups are queried.                                                                                                                                                                                                                                                                                                                           |
| backup_id   | No        | String | Backup ID.                                                                                                                                                                                                                                                                                                                                                                                            |
| backup_type | No        | String | Backup type.<br>Value options: <ul style="list-style-type: none"><li>• <b>Auto</b>: indicates that the backup is an automated full backup.</li><li>• <b>Manual</b>: indicates that the backup is a manual full backup.</li><li>• <b>Incremental</b>: indicates that the backup is an incremental backup.</li><li>• <b>Differential</b>: indicates that the backup is a differential backup.</li></ul> |
| begin_time  | No        | String | Start time of the query. The format is <b>yyyy-mm-dd hh:mm:ss</b> . The value is in UTC format.                                                                                                                                                                                                                                                                                                       |
| end_time    | No        | String | End time of the query. The format is <b>yyyy-mm-dd hh:mm:ss</b> . The value is in UTC format.                                                                                                                                                                                                                                                                                                         |

## Request Parameters

**Table 5-150** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-151** Response body parameters

| Parameter   | Type             | Description                                                 |
|-------------|------------------|-------------------------------------------------------------|
| total_count | Long             | Total number of records.                                    |
| backups     | Array of objects | Backup list. For details, see <a href="#">Table 5-152</a> . |

**Table 5-152** backups

| Parameter     | Type   | Description                                                                                                                                                                                                                                                                  |
|---------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id            | String | Backup ID.                                                                                                                                                                                                                                                                   |
| name          | String | Backup name.                                                                                                                                                                                                                                                                 |
| description   | String | Backup description.                                                                                                                                                                                                                                                          |
| begin_time    | String | Backup start time. The format of the start time is <b>yyyy-mm-dd hh:mm:ss</b> . The value is in UTC format.                                                                                                                                                                  |
| end_time      | String | Backup end time. The format of the end time is <b>yyyy-mm-dd hh:mm:ss</b> . The value is in UTC format.                                                                                                                                                                      |
| status        | String | Backup status.<br>Value options: <ul style="list-style-type: none"><li>• <b>BUILDING</b>: indicates that the backup is in progress.</li><li>• <b>COMPLETED</b>: indicates that the backup is completed.</li><li>• <b>FAILED</b>: indicates that the backup failed.</li></ul> |
| size          | Double | Backup size, in KB.                                                                                                                                                                                                                                                          |
| type          | String | Backup type.<br>Value options: <ul style="list-style-type: none"><li>• <b>Auto</b>: indicates that the backup is an automated full backup.</li><li>• <b>Manual</b>: indicates that the backup is a manual full backup.</li></ul>                                             |
| instance_id   | String | Instance ID.                                                                                                                                                                                                                                                                 |
| instance_name | String | Instance name.                                                                                                                                                                                                                                                               |
| datastore     | object | Database information. For details, see <a href="#">Table 5-153</a> .                                                                                                                                                                                                         |

**Table 5-153** datastore

| Parameter | Type   | Description       |
|-----------|--------|-------------------|
| type      | String | Database type.    |
| version   | String | Database version. |

## Example Requests

- **URI example**  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054b61972980d4552f0bc00ac8d3f5cd/backups?instance\_id=c0c9f155c7b7423a9d30f0175998b63bin01&offset=2&limit=2&begin\_time=2018-07-06 10:41:14&end\_time=2018-08-16 10:41:14&type=DatabaseTable
- **Incremental backups and their sizes**  
GET https://[Endpoint]/v3/2900b7b8d03e4619b8db8d43bc6234ee/backups?offset=1&limit=5&backup\_type=Incremental&instance\_id=3149aee486d748f68db1ee81e95b9f56in06
- **Differential backups and their sizes**  
GET https://[Endpoint]/v3/2900b7b8d03e4619b8db8d43bc6234ee/backups?offset=1&limit=5&backup\_type=Differential&instance\_id=3149aee486d748f68db1ee81e95b9f56in06
- **Example request body**  
None

## Example Responses

### Status code: 200

Success

```
{
 "total_count": 4,
 "backups": [
 {
 "id": "43e4feaab48f11e89039fa163ebaa7e4br01",
 "name": "backup-test",
 "instance_id": "43e4feaab48f11e89039fa163ebaa7e4br01",
 "instance_name": "cluster-test",
 "datastore": {
 "type": "cassandra",
 "version": "3.4"
 },
 "type": "Auto",
 "begin_time": "2018-08-06 12:41:14",
 "end_time": "2018-08-06 12:43:14",
 "status": "COMPLETED",
 "size": 2803,
 "description": "backup description",
 }, {
 "id": "43e4feaab48f11e89039fa163ebaa7e4br02",
 "name": "backup-test-2",
 "instance_id": "43e4feaab48f11e89039fa163ebaa7e4br02",
 "instance_name": "cluster-test",
 "datastore": {
 "type": "cassandra",
 "version": "3.4"
 },
 "type": "Manual",
 "begin_time": "2018-08-06 12:41:14",
 "end_time": "2018-08-06 12:43:14",
 "status": "COMPLETED",
 "size": 2803,
 }
]
}
```

```
 "description" : "backup description",
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.2 Querying Backups (Recommended)

### Function

This API is used to query backups based on specified conditions.

### URI

GET https://{{Endpoint}}/v3.1/{{project\_id}}/backups

**Table 5-154** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-155** Query parameters

| Parameter      | Mandatory | Type   | Description                                                                                                                                                                     |
|----------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id    | No        | String | Instance ID, which can be obtained by calling the API for querying instances. If there are no instances available, create one by calling the API used for creating an instance. |
| datastore_type | No        | String | Database type. The value can be: <ul style="list-style-type: none"><li>• <b>cassandra</b></li><li>• <b>redis</b></li><li>• <b>mongodb</b></li><li>• <b>influxdb</b></li></ul>   |
| backup_id      | No        | String | Backup ID.                                                                                                                                                                      |

| Parameter   | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| backup_type | No        | String  | <p>Backup type, which is case sensitive. The value can be:</p> <ul style="list-style-type: none"><li>• <b>Auto</b>, indicating that this backup is an automatic full backup.</li><li>• <b>Manual</b>, indicating that this backup is a manual full backup.</li><li>• If this parameter is not transferred, automated and manual full backups, including table-level backups, are both queried by default.</li></ul>                                  |
| type        | No        | String  | <p>Backup policy type. The value can be:</p> <ul style="list-style-type: none"><li>• <b>Instance</b>, indicating that an instance backup is queried.</li><li>• <b>DatabaseTable</b>, indicating that a database or table backup is queried.</li><li>• The default value is <b>Instance</b>.</li></ul>                                                                                                                                                |
| limit       | No        | Integer | <p>Maximum backup records to be queried. The value ranges from <b>1</b> to <b>100</b>. If this parameter is not transferred, the first 100 instances are queried by default.</p> <p>Minimum value: <b>1</b></p> <p>Maximum value: <b>100</b></p>                                                                                                                                                                                                     |
| offset      | No        | Integer | <p>Index position. The query starts from the next backup creation time indexed by this parameter under a specified project. If offset is set to <b>N</b>, the resource query starts from the <b>N+1</b> piece of data. The value must be no less than <b>0</b>. If this parameter is not transferred, the index offset is <b>0</b> by default, indicating that the query starts from the latest created instance.</p> <p>Minimum value: <b>0</b></p> |

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| begin_time | No        | String | <p>Start time of the backup query. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time. <b>Z</b> indicates the time zone offset and the default value is left blank by default.</p> <ul style="list-style-type: none"><li>When <b>end_time</b> is not empty, <b>begin_time</b> is mandatory.</li></ul> |
| end_time   | No        | String | <p>End time of the backup query. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time. <b>Z</b> indicates the time zone offset and the default value is left blank by default.</p> <ul style="list-style-type: none"><li>When <b>begin_time</b> is not empty, <b>end_time</b> is mandatory.</li></ul>   |

## Request Parameters

**Table 5-156** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-157** Response body parameters

| Parameter   | Type             | Description                                                    |
|-------------|------------------|----------------------------------------------------------------|
| total_count | Integer          | Total backups.                                                 |
| backups     | Array of objects | Backup details. For details, see <a href="#">Table 5-158</a> . |

**Table 5-158** Backup

| Parameter       | Type             | Description                                                                                                                                                                                                                                                                                                   |
|-----------------|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id              | String           | Backup ID.                                                                                                                                                                                                                                                                                                    |
| description     | String           | Backup description.                                                                                                                                                                                                                                                                                           |
| instance_id     | String           | ID of the instance that the backup is created for.                                                                                                                                                                                                                                                            |
| instance_name   | String           | Name of the instance that the backup is created for.                                                                                                                                                                                                                                                          |
| datastore       | object           | DB version information. For details, see <a href="#">Table 5-159</a> .                                                                                                                                                                                                                                        |
| name            | String           | Backup name.                                                                                                                                                                                                                                                                                                  |
| type            | String           | <ul style="list-style-type: none"><li>• <b>Auto</b>: indicates that this backup is an automatic full backup.</li><li>• <b>Manual</b>: indicates that this backup is a manual full backup.</li></ul>                                                                                                           |
| size            | Double           | Backup size, in KB.                                                                                                                                                                                                                                                                                           |
| status          | String           | Backup status. The value can be: <ul style="list-style-type: none"><li>• <b>BUILDING</b>, indicating that the backup is in progress.</li><li>• <b>COMPLETED</b>, indicating that the backup is completed.</li><li>• <b>FAILED</b>, indicating that the backup failed.</li></ul>                               |
| begin_time      | String           | Backup start time. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time, and <b>Z</b> indicates the time zone offset.                                                                                                                                                      |
| end_time        | String           | Backup end time. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time, and <b>Z</b> indicates the time zone offset.                                                                                                                                                        |
| database_tables | Array of objects | Database and table information in the backup. For details, see <a href="#">Table 5-160</a> . <ul style="list-style-type: none"><li>• Keep this parameter empty or ignore it when you query an instance backup.</li><li>• Specify this parameter when you query a database or table backup (if any).</li></ul> |

**Table 5-159** Datastore

| Parameter | Type   | Description       |
|-----------|--------|-------------------|
| type      | String | Database type.    |
| version   | String | Database version. |

**Table 5-160** QueryDatabaseTableInfo

| Parameter     | Type             | Description                                                                                                                                                                               |
|---------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| database_name | String           | Database name.                                                                                                                                                                            |
| table_names   | Array of strings | Table names. <ul style="list-style-type: none"><li>● If this parameter is empty, database names are queried.</li><li>● If this parameter is not empty, table names are queried.</li></ul> |

## Example Requests

- URI example  
GET [https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3.1/054b61972980d4552f0bc00ac8d3f5cd/backups?instance\\_id=c0c9f155c7b7423a9d30f0175998b63bin01&offset=2&limit=2&begin\\_time=2019-05-27T03:38:51+0000&end\\_time=2019-05-28T03:38:51+0000&type=DatabaseTable](https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3.1/054b61972980d4552f0bc00ac8d3f5cd/backups?instance_id=c0c9f155c7b7423a9d30f0175998b63bin01&offset=2&limit=2&begin_time=2019-05-27T03:38:51+0000&end_time=2019-05-28T03:38:51+0000&type=DatabaseTable)
- Example request body  
None

## Example Responses

### Status code: 200

Success

```
{
 "total_count": 4,
 "backups": [{
 "id": "43e4feaab48f11e89039fa163ebaa7e4br01",
 "name": "backup-test",
 "instance_id": "43e4feaab48f11e89039fa163ebaa7e4br01",
 "instance_name": "cluster-test",
 "datastore": {
 "type": "cassandra",
 "version": "3.4"
 },
 "type": "Auto",
 "begin_time": "2019-05-27T03:38:51+0000",
 "end_time": "2019-05-27T03:39:51+0000",
 "status": "COMPLETED",
 "size": 2803,
 "description": "backup description",
 "database_tables": [{
 "database_name": "DATABASE_X",
 "table_name": "TABLE_X",
 "size": 2803
 }]
 }]
}
```

```
 "table_names" : ["TABLE_A", "TABLE_B", "TABLE_C"]
 },
 "database_name" : "DATABASE_Y",
 "table_names" : null
}
},
{
 "id" : "43e4feaab48f11e89039fa163ebaa7e4br02",
 "name" : "backup-test-2",
 "instance_id" : "43e4feaab48f11e89039fa163ebaa7e4br02",
 "instance_name" : "cluster-test",
 "datastore" : {
 "type" : "cassandra",
 "version" : "3.4"
 },
 "type" : "Manual",
 "begin_time" : "2019-05-27T03:38:51+0000",
 "end_time" : "2019-05-27T03:39:51+0000",
 "status" : "COMPLETED",
 "size" : 2803,
 "description" : "backup description",
 "database_tables" : [
 {
 "database_name" : "DATABASE_X",
 "table_names" : ["TABLE_A", "TABLE_B", "TABLE_C"]
 },
 {
 "database_name" : "DATABASE_Y",
 "table_names" : null
 }
]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.4.3 Querying an Automated Backup Policy

#### Function

This API is used to query an automated backup policy, including GeminiDB Cassandra databases and tables.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

#### URI

GET [https://{{Endpoint}}/v3/{{project\\_id}}/instances/{{instance\\_id}}/backups/policy](https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/backups/policy)

**Table 5-161** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-162** Query parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                            |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | No        | String | Backup policy type. This parameter is available only to GeminiDB Cassandra. The value can be: <ul style="list-style-type: none"><li>• <b>Instance</b>, indicating that an instance backup is queried.</li><li>• <b>DatabaseTable</b>, indicating that a database or table backup is queried.</li><li>• The default value is <b>Instance</b>.</li></ul> |

## Request Parameters

**Table 5-163** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-164** Response body parameters

| Parameter     | Type   | Description                                                                                                                    |
|---------------|--------|--------------------------------------------------------------------------------------------------------------------------------|
| backup_policy | object | Backup policy objects, including backup retention period (days) and start time. For details, see <a href="#">Table 5-165</a> . |

**Table 5-165 ShowBackupPolicyResult**

| Parameter  | Type    | Description                                                                                                              |
|------------|---------|--------------------------------------------------------------------------------------------------------------------------|
| keep_days  | Integer | Backup retention days.                                                                                                   |
| start_time | String  | Backup time window. Automated backup will be triggered during the backup time window.                                    |
| period     | String  | Backup period. After a backup period is specified, data will be automatically backed up on the selected days every week. |

## Example Requests

### URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054b61972980d4552f0bc00ac8d3f5cd/instances/764b8a2763d34414ad3f2d5495416cb5in06/backups/policy?type=DatabaseTable
```

## Example Responses

### Status code: 200

Success

Enabling automated backup

```
{
 "backup_policy": {
 "keep_days": 7,
 "start_time": "19:00-20:00",
 "period": "1,2,4,5,6"
 }
}
```

Disabling automated backup

```
{
 "backup_policy": {
 "keep_days": 0
 }
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.4 Configuring an Automated Backup Policy

### Function

This API is used to configuring an automated backup policy.

## Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Influx

## URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/backups/policy

**Table 5-166** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-167** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-168** Request body parameters

| Parameter     | Mandatory | Type   | Description                                                                                                                    |
|---------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------|
| backup_policy | Yes       | object | Backup policy objects, including backup retention period (days) and start time. For details, see <a href="#">Table 5-169</a> . |

**Table 5-169** BackupPolicy

| Parameter | Mandatory | Type    | Description                                                                                                                                     |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| keep_days | Yes       | Integer | Backup retention days. The value ranges from <b>0</b> to <b>35</b> . The value <b>0</b> indicates that the automated backup policy is disabled. |

| Parameter  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| start_time | No        | String | <p>Backup time window. Automated backup will be triggered during the backup time window. This parameter is mandatory if the automated backup policy is enabled. If the policy is disabled, you do not need to transfer this parameter.</p> <p>The value must be the UTC time in the hh:mm-HH:MM format.</p> <ul style="list-style-type: none"><li>• The <b>HH</b> value must be 1 greater than the <b>hh</b> value.</li><li>• The values of <b>mm</b> and <b>MM</b> must be the same and must be set to <b>00, 15, 30, or 45</b>.</li><li>• Example value: <b>23:00-00:00</b></li></ul>                                                                                                                                                                                                                                            |
| period     | No        | String | <p>Backup period. After a backup period is specified, data will be automatically backed up on the selected days every week. This parameter is mandatory if the automated backup policy is enabled. If the policy is disabled, you do not need to transfer this parameter.</p> <p>The value is a list of digits separated by commas (,). Each digit indicates a day of the week. The restrictions on the backup period are as follows:</p> <ul style="list-style-type: none"><li>• If you set <b>keep_days</b> to <b>0</b>, this parameter is not transferred.</li><li>• If you set <b>keep_days</b> to <b>1 to 6</b>, set this parameter to <b>1, 2, 3, 4, 5, 6, 7</b>.</li><li>• If you set <b>keep_days</b> to <b>7 to 35</b>, select at least one day of the week for the backup cycle. Example value: <b>1,2,3,4</b></li></ul> |

## Response Parameters

**Status code: 204**

No response parameters

## Example Requests

- **URI example**

```
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/backups/policy
```

- **Example request body**

Enabling or modifying the automated backup policy (Set **period** to **1, 2, 3, 4, 5**, and **6**, **start\_time** to **01:00-02:00**, and **keep\_days** to **7**.)

```
{
 "backup_policy" : {
 "period" : "1,2,3,4,5,6",
 "start_time" : "01:00-02:00",
 "keep_days" : 7
 }
}
```

Disabling automated backup

```
{
 "backup_policy" : {
 "keep_days" : 0
 }
}
```

## Example Responses

**Status code: 204**

No Content

```
{}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.5 Querying Instances that Can Be Restored

### Function

This API is used to query all instances that can be restored.

### Constraints

This API supports only GeminiDB Mongo instances.

## URI

GET https://{{Endpoint}}/v3/{project\_id}/backups/{backup\_id}/restorable-instances

**Table 5-170** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                          |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| backup_id  | Yes       | String | Backup file ID.                                                                                      |

**Table 5-171** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                |
|-----------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | Index offset. The value must be no less than <b>0</b> . If this parameter is not transferred, the index offset is 0 by default.                                            |
| limit     | No        | Integer | Maximum instances that can be restored. The value ranges from <b>1</b> to <b>100</b> . If this parameter is not transferred, the first 100 records are queried by default. |

## Request Parameters

**Table 5-172** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-173** Response body parameters

| Parameter            | Type                                                    | Description                                           |
|----------------------|---------------------------------------------------------|-------------------------------------------------------|
| total_count          | Integer                                                 | Total number of instances that can be restored.       |
| restorable_instances | Array of<br><a href="#">QueryRestoreList</a><br>objects | Information about the instances that can be restored. |

**Table 5-174** QueryRestoreList

| Parameter          | Type                | Description         |
|--------------------|---------------------|---------------------|
| instance_id        | String              | Instance ID.        |
| instance_mode      | String              | Instance type.      |
| engine_name        | String              | API name.           |
| engine_version     | String              | API version.        |
| vpc_id             | String              | VPC ID.             |
| subnet_ids         | Array of<br>strings | Subnet IDs.         |
| security_group_ids | Array of<br>strings | Security group IDs. |

## Example Requests

### URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/backups/2b19a3348108411baf7c46cf8d668e90br10/restorable-instances?offset=0&limit=100
```

## Example Responses

### Status code: 200

Success

```
{
 "total_count": 1,
 "restorable_instances": [{
 "instance_id": "6aef2786115341b6a18a67e0ee6ef664in10",
 "instance_mode": "ReplicaSet",
 "engine_name": "geminimongodb",
 "engine_version": "4.0.3.11",
 "vpc_id": "674e9b42-cd8d-4d25-a2e6-5abcc565b961",
 "subnet_ids": ["f1df08c5-71d1-406a-aff0-de435a51007"],
 "security_group_ids": ["7aa51dbf-5b63-40db-9724-dad3c4828b58"]
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.6 Querying the Time Window When a Backup Can Be Restored

### Function

This API is used to query the time window when a backup can be restored.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Influx

This API does not support single-node GeminiDB Influx instances.

Make sure that full backup, incremental backup, and automated backup have been enabled. To enable incremental backup, contact customer service. This function can be used only when the next automated backup is performed.

This API can be used to query the time point that a backup can be restored to, so values of `start_time` and `end_time` are the same.

### URI

GET https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/backups/restorable-time-periods

**Table 5-175** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> .                                                                                                                                   |
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

**Table 5-176** Query parameters

| Parameter  | Mandatory | Type    | Description                                                                                                                                                                                |
|------------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| start_time | No        | String  | Start time point that the backup can be restored to. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time, and <b>Z</b> indicates the time zone offset. |
| end_time   | No        | String  | End time point that the backup can be restored to. The time point is in the yyyy-mm-ddThh:mm:ssZ format. <b>T</b> indicates the start time, and <b>Z</b> indicates the time zone offset.   |
| offset     | No        | Integer | Offset. The records after this offset will be queried. The default value is <b>0</b> .                                                                                                     |
| limit      | No        | Integer | Maximum number of records displayed on each page. The value ranges from <b>0</b> to <b>1000</b> . The default value is <b>1000</b> .                                                       |

## Request Parameters

**Table 5-177** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-178** Response body parameters

| Parameter               | Type                                   | Description                                       |
|-------------------------|----------------------------------------|---------------------------------------------------|
| total_count             | Integer                                | Total time windows when a backup can be restored. |
| restorable_time_periods | Array of <b>restorableTime</b> objects | Time windows when a backup can be restored.       |

**Table 5-179** restorableTime

| Parameter  | Type | Description                                                                                                              |
|------------|------|--------------------------------------------------------------------------------------------------------------------------|
| start_time | Long | Start time of the restoration time range in the UNIX timestamp format. The start time is the UTC time in milliseconds.   |
| end_time   | Long | End time point of the restoration time range in the UNIX timestamp format. The end time is the UTC time in milliseconds. |

## Example Request

- URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/a4d8ea2584e047439a667703c0684119in06/backups/restorable-time-periods?start_time=2022-06-01T18:50:20+0800&end_time=2022-06-01T19:50:20+0800&offset=0&limit=1000
```

## Example Response

**Status code: 200**

Success

```
{
 "total_count": 1,
 "restorable_time_periods": [{
 "start_time": 1607731200000,
 "end_time": 1607731200000
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.7 Creating a Manual Backup

### Function

This API is used to create a manual backup.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra

- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

## URI

POST https://{Endpoint}/v3/{project\_id}/instances/{instance\_id}/backups

**Table 5-180** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                          |
|-------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                         |

## Request Parameters

**Table 5-181** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-182** Request body parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                               |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | Yes       | String | Manual backup name.<br>The name can include 4 to 64 characters and must start with a letter. It is case-sensitive and can contain only letters, digits, hyphens (-), and underscores (_). |
| description | Yes       | String | Manual backup description.<br>The description can include a maximum of 256 characters and cannot contain the following special characters: >!<"&=                                         |

## Response Parameters

**Status code: 200**

**Table 5-183** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |
| backup_id | String | Backup ID.  |

## Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/a4d8ea2584e047439a667703c0684119in06/backups
```

- Creating a manual backup

```
{
 "name": " Create a manual backup",
 "description": " Creating a manual backup",
}
```

## Example Responses

### Status code: 200

Success

```
{
 "job_id" : "8061ceaf-b319-4315-9338-7f3de8e26f05",
 "backup_id" : "646d88d0b03f4fd2ae944ae2a33bcb6ain06"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.8 Deleting a Manual Backup

### Function

This API is used to delete a manual backup.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

## URI

DELETE https://{Endpoint}/v3/{project\_id}/backups/{backup\_id}

**Table 5-184** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                          |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| backup_id  | Yes       | String | Backup file ID.                                                                                      |

## Request Parameters

**Table 5-185** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 202**

**Table 5-186** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Request

- URI example

```
DELETE https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/backups/5b0ae36cb8a746b68685a8fb588d8a15br06
```

## Example Response

**Status code: 202**

Accepted

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.9 Restoring Data to an Existing Instance

### Function

This API is used to restore data to an existing instance.

### Constraints

This API supports GeminiDB Mongo instances.

The destination instance cannot be an instance that is undergoing a restoration task.

The destination instance must be of a version no earlier than and the specifications no lower than the source and have storage space no smaller than the size of the used backup file.

### URI

POST `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/recovery`

**Table 5-187** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                            |
|-------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> .                                                                                                                                   |
| instance_id | Yes       | String | Instance ID, which can be obtained by calling the API described in <a href="#">Querying Instances and Details</a> . If there are no instances available, call the API described in <a href="#">Creating an Instance</a> to create one. |

## Request Parameters

**Table 5-188** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-189** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| backup_id | Yes       | String | Backup file name. You can restore a backup file to an existing instance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| password  | No        | String | <p>Instance password.<br/>The password can include 8 to 32 characters and contain uppercase letters, lowercase letters, digits, and the following special characters: ~!@#\$%^*-_=+? The password of GeminiDB Redis instances can contain at least two types of the following characters: uppercase letters, lowercase letters, digits, and special characters (~!@#\$%^&amp;*()_-_=+?).</p> <ul style="list-style-type: none"><li>• If this parameter is not specified, the password stored in the backup file will overwrite the password of the existing instance after restoration is complete.</li><li>• If this parameter is specified, the configured password will overwrite the password of the existing instance after restoration is complete.</li></ul> |

## Response Parameters

**Status code: 202**

**Table 5-190** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/61f554065802400c9c33f87e8114f081in10/recovery
- Restoring data to an existing instance  
{  
  "backup\_id": "a8114c9b30cf42b6ba7752bfa62dee0bbr10",  
  "password": "\*\*\*\*\*"  
}

## Example Responses

Status code: 202

Accepted

```
{
 "job_id": "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.10 Querying the Recycling Policy

### Function

This API is used to query the recycling policy.

### URI

GET https://{Endpoint}/v3/{project\_id}/instances/recycle-policy

**Table 5-191** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                          |
|------------|-----------|--------|------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a user in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-192** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-193** Response body parameters

| Parameter      | Type   | Description                                                      |
|----------------|--------|------------------------------------------------------------------|
| recycle_policy | object | Recycling policy. For details, see <a href="#">Table 5-194</a> . |

**Table 5-194** RecyclePolicy

| Parameter                | Type    | Description                                                                                       |
|--------------------------|---------|---------------------------------------------------------------------------------------------------|
| retention_period_in_days | Integer | Policy retention duration (1 to 7 days). The value is a positive integer. The default value is 7. |

## Example Requests

- URI example  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/recycle-policy
- Example request body  
None

## Example Responses

Status code: 200

Success

```
{
 "recycle_policy": {
 "retention_period_in_days": 7
 }
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.4.11 Modifying the Recycling Policy

#### Function

This API is used to change a retention period for deleted instances. The new retention period is available to only those instances deleted after the change, but not to the instances already moved to the recycle bin before the change.

#### Constraints

The retention period for deleted instances can be 1 to 7 days.

#### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/recycle-policy

**Table 5-195** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

#### Request Parameters

**Table 5-196** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-197** Request body parameters

| Parameter      | Mandatory | Type   | Description                                                      |
|----------------|-----------|--------|------------------------------------------------------------------|
| recycle_policy | Yes       | object | Recycling policy. For details, see <a href="#">Table 5-198</a> . |

**Table 5-198** RecyclePolicy

| Parameter                | Mandatory | Type    | Description                                                                                       |
|--------------------------|-----------|---------|---------------------------------------------------------------------------------------------------|
| retention_period_in_days | No        | Integer | Policy retention duration (1 to 7 days). The value is a positive integer. The default value is 7. |

## Response Parameters

**Status code: 200**

No response parameters

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/recycle-policy
- Setting the retention period of instances in the recycle bin to 3 days  
{  
  "recycle\_policy": {  
    "retention\_period\_in\_days": 3  
  }  
}

## Example Responses

None

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.12 Querying Instances in the Recycle Bin

### Function

This API is used to query all instances in the recycle bin.

### URI

GET https://{Endpoint}/v3/{project\_id}/recycle-instances

**Table 5-199** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-200** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <ul style="list-style-type: none"><li>If <b>offset</b> is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If <b>action</b> is set to <b>filter</b>, <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data.</li><li>The value must be a positive integer.</li></ul> |
| limit     | No        | Integer | <p>Maximum records to be queried.</p> <ul style="list-style-type: none"><li>The value ranges from <b>1</b> to <b>100</b>.</li><li>If this parameter is not transferred, the first 100 records are queried by default.</li></ul>                                                                                                                                     |

## Request Parameters

**Table 5-201** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-202** Response body parameters

| Parameter   | Type             | Description                                                          |
|-------------|------------------|----------------------------------------------------------------------|
| total_count | Integer          | Total number of records.                                             |
| instances   | Array of objects | Instance information. For details, see <a href="#">Table 5-203</a> . |

**Table 5-203** RecycleInstance

| Parameter             | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id                    | String | Instance ID.                                                                                                                                                                                                                                                                                                                                                                                                                   |
| name                  | String | Instance name.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| mode                  | String | Instance type. The value can be: <ul style="list-style-type: none"><li>• <b>Cluster</b>, indicating that the instance is a GeminiDB Cassandra, GeminiDB Influx, or GeminiDB Redis replica set instance.</li><li>• <b>InfluxdbSingle</b>, indicating that the instance is a single-node GeminiDB Influx instance.</li><li>• <b>ReplicaSet</b>, indicating that the instance is a GeminiDB Mongo replica set instance.</li></ul> |
| datastore             | object | Database information For details, see <a href="#">Table 5-204</a> .                                                                                                                                                                                                                                                                                                                                                            |
| charge_mode           | String | Billing mode. Options: <ul style="list-style-type: none"><li>• <b>prePaid</b>: indicates that the billing mode is yearly/monthly.</li><li>• <b>postPaid</b>: indicates that the billing mode is pay-per-use.</li></ul>                                                                                                                                                                                                         |
| enterprise_project_id | String | Enterprise project ID. The value <b>0</b> indicates that the default enterprise project is used.                                                                                                                                                                                                                                                                                                                               |
| backup_id             | String | Backup ID.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| created_at            | String | Instance creation time.                                                                                                                                                                                                                                                                                                                                                                                                        |
| deleted_at            | String | Instance deletion time.                                                                                                                                                                                                                                                                                                                                                                                                        |
| retained_until        | String | Retention end time.                                                                                                                                                                                                                                                                                                                                                                                                            |

**Table 5-204** RecycleDatastore

| Parameter | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | String | Database type. The value can be: <ul style="list-style-type: none"><li>• <b>cassandra</b>, indicating that target instances are of the GeminiDB Cassandra type.</li><li>• <b>mongodb</b>, indicating that target instances are of the GeminiDB Mongo type.</li><li>• <b>influxdb</b>, indicating that target instances are of the GeminiDB Influx type.</li><li>• <b>redis</b>, indicating that target instances are of the GeminiDB Redis type.</li></ul> |
| version   | String | Database version. The value can be:                                                                                                                                                                                                                                                                                                                                                                                                                        |

## Example Requests

- **URI example**  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/recycle-instances?offset=0&limit=100
- **Example request body**  
None

## Example Responses

### Status code: 200

Success

```
{
 "total_count": 1,
 "instances": [{
 "id": "07fc12a8e0e94df7a3fcf53d0b5e1605in06",
 "name": "test",
 "mode": "Cluster",
 "datastore": {
 "type": "cassandra",
 "version": "3.11"
 },
 "charge_mode": "postPaid",
 "enterprise_project_id": "0",
 "backup_id": "bf9ee62a7f7044c583c6765c916c36edbr02",
 "created_at": "2022-01-01T10:00:00",
 "deleted_at": "2022-02-01T11:00:00",
 "retained_until": "2022-02-02T11:00:00"
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.13 Obtaining GeminiDB Cassandra Instance Database Information That Is Restored Using Tables

### Function

This API is used to obtain GeminiDB Cassandra instance database information that is restored using tables.

### Constraints

- This API supports only GeminiDB Cassandra API.

### URI

GET `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/databases`

**Table 5-205** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-206** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index position.</p> <ul style="list-style-type: none"><li>• Index position. The query starts from the dedicated resource created after the dedicated resource indexed by this parameter in a specified project. If offset is set to <code>N</code>, the resource query starts from the <code>N+1</code> piece of data.</li><li>• The value must be no less than <code>0</code>.</li><li>• If this parameter is not transferred, <b>offset</b> is set to <code>0</code> by default, indicating that the query starts from the latest created dedicated resource.</li></ul> |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                              |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | Maximum of dedicated resources to be queried. <ul style="list-style-type: none"><li>The value ranges from <b>1</b> to <b>100</b>. If this parameter is not transferred, the first 100 instance records are queried by default.</li></ul> |

## Request Parameters

**Table 5-207** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-208** Response body parameters

| Parameter      | Type             | Description              |
|----------------|------------------|--------------------------|
| total_count    | Integer          | Total number of records. |
| database_names | Array of strings | Database names.          |

## Example Requests

```
GET https://[endpoint]/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/a6d3c8a9857b4c81b3c1fe4802dfa4d0in06/databases?offset=0&limit=10
```

## Example Responses

**Status code: 200**

Success

```
{
 "total_count": 1,
 "database_names": ["db01"]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.4.14 Obtaining GeminiDB Cassandra Instance Table Information That Is Restored Using Tables

### Function

This API is used to obtain GeminiDB Cassandra instance table information that is restored using tables.

### Constraints

- This API supports only GeminiDB Cassandra API.

### URI

GET `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/tables`

**Table 5-209** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-210** Query parameters

| Parameter     | Mandatory | Type   | Description    |
|---------------|-----------|--------|----------------|
| database_name | Yes       | String | Database name. |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index position.</p> <ul style="list-style-type: none"><li>• Index position. The query starts from the dedicated resource created after the dedicated resource indexed by this parameter in a specified project. If offset is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data.</li><li>• The value must be no less than <b>0</b>.</li><li>• If this parameter is not transferred, <b>offset</b> is set to <b>0</b> by default, indicating that the query starts from the latest created dedicated resource.</li></ul> |
| limit     | No        | Integer | <p>Maximum of dedicated resources to be queried.</p> <ul style="list-style-type: none"><li>• The value ranges from <b>1</b> to <b>100</b>. If this parameter is not transferred, the first 100 instances are queried by default.</li></ul>                                                                                                                                                                                                                                                                                                           |

## Request Parameters

**Table 5-211** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-212** Response body parameters

| Parameter   | Type    | Description              |
|-------------|---------|--------------------------|
| total_count | Integer | Total number of records. |

| Parameter   | Type             | Description  |
|-------------|------------------|--------------|
| table_names | Array of strings | Table names. |

## Example Requests

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/a6d3c8a9857b4c81b3c1fe4802dfa4d0in06/tables?offset=0&limit=10&database_name=db01
```

## Example Responses

**Status code: 200**

Success

```
{
 "total_count": 1,
 "table_names": ["tb01"]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5 Parameter Templates

### 5.5.1 Obtaining Parameter Templates

#### Function

This API is used to obtain parameter templates, including all of the default and custom parameter templates.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

#### URI

```
GET https://{Endpoint}/v3.1/{project_id}/configurations
```

**Table 5-213** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

**Table 5-214** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                         |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <ul style="list-style-type: none"><li>If <b>offset</b> is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If <b>action</b> is set to <b>filter</b>, <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data.</li><li>The value must be a positive integer.</li></ul> |
| limit     | No        | Integer | <p>Maximum number of instances that can be queried.</p> <ul style="list-style-type: none"><li>The value ranges from <b>1</b> to <b>100</b>.</li><li>If this parameter is not transferred, the first 100 records are queried by default.</li></ul>                                                                                                                   |

## Request Parameters

**Table 5-215** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-216** Response body parameters

| Parameter      | Type                                                       | Description                                                          |
|----------------|------------------------------------------------------------|----------------------------------------------------------------------|
| count          | Integer                                                    | Total number of records.                                             |
| quota          | Integer                                                    | Maximum number of custom parameter templates that a user can create. |
| configurations | Array of <a href="#">ListConfigurations-Result</a> objects | Parameter templates.                                                 |

**Table 5-217** ListConfigurationsResult

| Parameter              | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id                     | String | Parameter template ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| name                   | String | Parameter template name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| description            | String | Parameter template description.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| datastore_version_name | String | Database version name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| datastore_name         | String | Database name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| created                | String | Creation time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                                                                                                                                                                                                                                                                                             |
| updated                | String | Update time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                                                                                                                                                                                                                                                                                               |
| mode                   | String | Instance type. The value can be:<br><b>Cluster</b> , indicating that the instance is of the GeminiDB Cassandra cluster type.<br><b>ReplicaSet</b> , indicating that the instance is of the GeminiDB Mongo replica set type.<br><b>Sharding</b> , indicating that the instance is of the GeminiDB Mongo cluster type.<br><b>Cluster</b> , indicating that the instance is of the GeminiDB Influx cluster type.<br><b>InfluxdbSingle</b> , indicating that the instance is of the single-node GeminiDB Influx type. |

| Parameter    | Type    | Description                                                                                                                                                                                                                                                                                        |
|--------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| user_defined | Boolean | Whether the parameter template is a custom template. The value can be: <ul style="list-style-type: none"><li>• <b>false</b>, indicating that the parameter template is a default parameter template.</li><li>• <b>true</b>, indicating that the parameter template is a custom template.</li></ul> |

## Example Requests

### URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3.1/375d8d8fad1f43039e23d3b6c0f60a19/configurations?offset=0&limit=10

## Example Responses

### Status code: 200

Success

```
{
 "count": 2,
 "quota": 100,
 "configurations": [{
 "id": "887ea0d1bb0843c49e8d8e5a09a95652pr06",
 "name": "configuration_test",
 "description": "configuration_test",
 "datastore_version_name": "3.11",
 "datastore_name": "cassandra",
 "created": "2019-05-15T11:53:34+0000",
 "updated": "2019-05-15T11:53:34+0000",
 "mode": "Cluster",
 "user_defined": true
 }, {
 "id": "3bc1e9cc0d34404b9225ed7a58fb284epr06",
 "name": "Default-Cassandra-3.11",
 "description": "Default parameter group for cassandra 3.11",
 "datastore_version_name": "3.11",
 "datastore_name": "cassandra",
 "created": "2019-05-27T03:38:51+0000",
 "updated": "2019-05-27T03:38:51+0000",
 "mode": "Cluster",
 "user_defined": false
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.2 Creating a Parameter Template

### Function

This API is used to create a parameter template and configure the name, description, DB engine version, and parameter values in the parameter template.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

The new parameter template cannot have the same name as any existing parameter template.

For configuration item **values**, you can enter system-defined parameters that allow for modification.

### URI

POST https://{Endpoint}/v3/{project\_id}/configurations

**Table 5-218** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

### Request Parameters

**Table 5-219** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-220** Request body parameters

| Parameter   | Mandatory | Type                                                | Description                                                                                                                                                                          |
|-------------|-----------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | Yes       | String                                              | Parameter template name. It can include a maximum of 64 characters and can contain only uppercase letters, lowercase letters, digits, hyphens (-), underscores (_), and periods (.). |
| description | No        | String                                              | Parameter template description. It can contain a maximum of 256 characters except the following special characters: >!<"&=' The value is left blank by default.                      |
| values      | No        | Map<String, String>                                 | Parameter values defined by users based on a default parameter template. Keep the parameter values unchanged by default.                                                             |
| datastore   | Yes       | <a href="#">ConfigurationDatastoreOption object</a> | Database object.                                                                                                                                                                     |

**Table 5-221** ConfigurationDatastoreOption

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                    |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | Yes       | String | Database type. The value can be:<br><b>cassandra</b> , indicating that the instances are of the GeminiDB Cassandra type.<br><b>mongodb</b> , indicating that the instances are of the GeminiDB Mongo type.<br><b>influxdb</b> , indicating that the instances are of the GeminiDB Influx type. |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                       |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| version   | Yes       | String | Database version. The value can be:<br><b>3.11</b> , indicating that GeminiDB Cassandra 3.11 is supported.<br><b>4.0</b> , indicating that GeminiDB Mongo 4.0 is supported.<br><b>1.7</b> , indicating that GeminiDB Influx 1.7 is supported.                                                                                                     |
| mode      | No        | String | Database deployment mode. This parameter is mandatory for GeminiDB Mongo. The options are as follows: <ul style="list-style-type: none"><li>• <b>ReplicaSet</b>, indicating that the instance is a GeminiDB Mongo replica set.</li><li>• <b>InfluxdbSingle</b>, indicating that the instance is a single-node GeminiDB Influx instance.</li></ul> |

## Response Parameters

Status code: 200

**Table 5-222** Response body parameters

| Parameter     | Type                                       | Description                     |
|---------------|--------------------------------------------|---------------------------------|
| configuration | <a href="#">ConfigurationResult object</a> | Parameter template information. |

**Table 5-223** ConfigurationResult

| Parameter              | Type   | Description                    |
|------------------------|--------|--------------------------------|
| id                     | String | Parameter template ID.         |
| name                   | String | Parameter template name.       |
| datastore_version_name | String | Database version name.         |
| datastore_name         | String | Database name.                 |
| description            | String | Parameter template description |

| Parameter | Type   | Description                                       |
|-----------|--------|---------------------------------------------------|
| created   | String | Creation time in the yyyy-MM-ddTHH:mm:ssZ format. |
| updated   | String | Update time in the yyyy-MM-ddTHH:mm:ssZ format.   |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations
- Creating a parameter template for GeminiDB Cassandra instances  
{  
    "name" : "configuration\_test",  
    "description" : "configuration\_test",  
    "values" : {  
        "max\_connections" : "10",  
        "autocommit" : "OFF"  
    },  
    "datastore" : {  
        "type" : "cassandra",  
        "version" : "3.11"  
    }  
}

## Example Responses

Status code: 200

Success

```
{
 "configuration" : {
 "id" : "463b4b58d0e84e2b95605dea4552fdpr06",
 "name" : "configuration_test",
 "datastore_version_name" : "3.11",
 "datastore_name" : "cassandra",
 "description" : "configuration_test",
 "created" : "2020-03-09T08:27:56+0800",
 "updated" : "2020-03-09T08:27:56+0800"
 }
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.3 Modifying Parameters in a Parameter Template

### Function

This API is used to modify parameters in a specified parameter template, including parameter names, descriptions, and values.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

The modified parameter template name must be different from the name of any existing or default parameter template.

Default parameter templates cannot be modified.

For configuration item **values**, you can enter system-defined parameters that allow for modification.

### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/configurations/{{config\_id}}

**Table 5-224** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

### Request Parameters

**Table 5-225** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-226** Request body parameters

| Parameter   | Mandatory | Type                | Description                                                                                                                                                                          |
|-------------|-----------|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | No        | String              | Parameter template name. It can include a maximum of 64 characters and can contain only uppercase letters, lowercase letters, digits, hyphens (-), underscores (_), and periods (.). |
| description | No        | String              | Parameter template description. It can include a maximum of 256 characters and cannot contain the following special characters: >!<"&='= The value is left blank by default.         |
| values      | No        | Map<String, String> | Parameter values defined by users based on a default parameter template. If this parameter is not specified, no parameter values are to be changed.                                  |

## Response Parameters

**Status code: 200**

No response parameters

## Example Requests

- **URI example**  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/e02e76567ae04662a2753492b77f965bpr06
- **Modifying Parameters in a Parameter Template**



At least one parameter in the request body must be specified. Otherwise, the request cannot be delivered.

```
{
 "name" : "configuration_test",
 "description" : "configuration_test",
 "values" : {
 "concurrent_reads" : "64"
 }
}
```

## Example Responses

None

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.4 Applying a Parameter Template

### Function

This API is used to apply a parameter template to one or more instances.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

This API is an asynchronous API. A successful response does not indicate that the parameter template is successfully applied.

### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/configurations/{{config\_id}}/apply

**Table 5-227** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

### Request Parameters

**Table 5-228** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-229** Request body parameters

| Parameter    | Mandatory | Type             | Description   |
|--------------|-----------|------------------|---------------|
| instance_ids | Yes       | Array of strings | Instance IDs. |

## Response Parameters

**Status code: 200**

**Table 5-230** Response body parameters

| Parameter | Type    | Description                                                                                                                                                                                                                                                                        |
|-----------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| job_id    | String  | ID of the asynchronous task that applies the parameter template.                                                                                                                                                                                                                   |
| success   | Boolean | Whether the task for applying the parameter template is successfully submitted. The value can be: <ul style="list-style-type: none"><li>• <b>true</b>, indicating the task is successfully submitted.</li><li>• <b>false</b>, indicating the task fails to be submitted.</li></ul> |

## Example Requests

- **URI example**  
`PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/e02e76567ae04662a2753492b77f965bpr06/apply`
- **Applying a Parameter Template**  
`{  
 "instance_ids" : [ "73ea2bf70c73497f89ee0ad4ee008aa2in06" ]  
}`

## Example Responses

**Status code: 200**

Success

```
{
 "job_id" : "463b4b58-d0e8-4e2b-9560-5dea4552fde9",
 "success" : true
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.5 Modifying Parameters of a Specified Instance

### Function

This API is used to modify parameters of a specified instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

For configuration item **values**, you can enter system-defined parameters that allow for modification.

This API is an asynchronous API. A successful response does not indicate that the parameters are successfully modified.

### URI

PUT https://{{Endpoint}}/v3/{{project\_id}}/instances/{{instance\_id}}/configurations

**Table 5-231** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-232** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-233** Request body parameters

| Parameter | Mandatory | Type                | Description                                                              |
|-----------|-----------|---------------------|--------------------------------------------------------------------------|
| values    | Yes       | Map<String, String> | Parameter values defined by users based on a default parameter template. |

## Response Parameters

**Status code: 200**

**Table 5-234** Response body parameters

| Parameter        | Type    | Description                                                                                                                                                                                                                                                          |
|------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| job_id           | String  | ID of the asynchronous task for modifying instance parameters.                                                                                                                                                                                                       |
| restart_required | Boolean | Whether the instance needs to be restarted. The value can be: <ul style="list-style-type: none"><li>• <b>true</b>, indicating that the instance needs to be restarted.</li><li>• <b>false</b>, indicating that the instance does not need to be restarted.</li></ul> |

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/392850e624504e1490901d50b585a60din06/configurations
- Modifying Parameters of a Specified Instance  

```
{
 "values" : {
 "request_timeout_in_ms" : "10000"
 }
}
```

## Example Responses

**Status code: 200**

Success

```
{
 "job_id" : "463b4b58-d0e8-4e2b-9560-5dea4552fde9",
 "restart_required" : false
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.6 Querying Instance Parameter Settings

### Function

This API is used to query instance parameter settings.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

### URI

GET `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/configurations`

**Table 5-235** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-236** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

### Response Parameters

Status code: 200

**Table 5-237** Response body parameters

| Parameter                | Type                                                          | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| datastore_version_name   | String                                                        | Database version name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| datastore_name           | String                                                        | Database name.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| created                  | String                                                        | Creation time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                                                                                                                                                                                                                                                                                             |
| updated                  | String                                                        | Update time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                                                                                                                                                                                                                                                                                               |
| id                       | String                                                        | Parameter template ID.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| mode                     | String                                                        | Instance type. The value can be:<br><b>Cluster</b> , indicating that the instance is of the GeminiDB Cassandra cluster type.<br><b>ReplicaSet</b> , indicating that the instance is of the GeminiDB Mongo replica set type.<br><b>Sharding</b> , indicating that the instance is of the GeminiDB Mongo cluster type.<br><b>Cluster</b> , indicating that the instance is of the GeminiDB Influx cluster type.<br><b>InfluxdbSingle</b> , indicating that the instance is of the single-node GeminiDB Influx type. |
| configuration_parameters | Array of <a href="#">ConfigurationParameterResult</a> objects | Parameters defined by users based on a default parameter template.                                                                                                                                                                                                                                                                                                                                                                                                                                                |

**Table 5-238** ConfigurationParameterResult

| Parameter | Type   | Description      |
|-----------|--------|------------------|
| name      | String | Parameter name.  |
| value     | String | Parameter value. |

| Parameter        | Type    | Description                                                                                                                                                                                                                                                          |
|------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| restart_required | Boolean | Whether the instance needs to be restarted. The value can be: <ul style="list-style-type: none"><li>• <b>false</b>, indicating that the instance does not need to be restarted.</li><li>• <b>true</b>, indicating that the instance needs to be restarted.</li></ul> |
| readonly         | Boolean | Whether the parameter is read-only. The value can be: <ul style="list-style-type: none"><li>• <b>false</b>, indicating that the parameter is not read-only.</li><li>• <b>true</b>, indicating that the parameter is read-only.</li></ul>                             |
| value_range      | String  | Value range. For example, the value of the Integer type ranges from <b>0</b> to <b>1</b> , and the value of the Boolean type is <b>true</b> or <b>false</b> .                                                                                                        |
| type             | String  | Parameter type. The value can be <b>string</b> , <b>integer</b> , <b>boolean</b> , <b>list</b> , or <b>float</b> .                                                                                                                                                   |
| description      | String  | Parameter description.                                                                                                                                                                                                                                               |

## Example Requests

### URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/configurations
```

## Example Responses

### Status code: 200

Success

```
{
 "datastore_version_name": "3.11",
 "datastore_name": "cassandra",
 "created": "2020-03-21 11:40:44",
 "updated": "2020-03-21 11:40:44",
 "id": "9ad6bc82146e4043a50c963ab3bf09adpr06",
 "mode": "Cluster",
 "configuration_parameters": [{
 "name": "concurrent_reads",
 "value": "64",
 "restart_required": true,
 "readonly": true,
 "value_range": "4-512",
 "type": "integer",
 "description": "Number of concurrent read threads."
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.7 Obtaining Parameters of a Specified Parameter Template

### Function

This API is used to obtain information about parameters of a specified parameter template.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

### URI

GET https://{{Endpoint}}/v3/{{project\_id}}/configurations/{{config\_id}}

**Table 5-239** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

### Request Parameters

**Table 5-240** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

### Response Parameters

**Status code: 200**

**Table 5-241** Response body parameters

| Parameter                | Type                                                             | Description                                                                                                                                                           |
|--------------------------|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| id                       | String                                                           | Parameter template ID.                                                                                                                                                |
| name                     | String                                                           | Parameter template name.                                                                                                                                              |
| description              | String                                                           | Parameter template description.                                                                                                                                       |
| datastore_version_name   | String                                                           | Database version name.                                                                                                                                                |
| datastore_name           | String                                                           | Database name.                                                                                                                                                        |
| created                  | String                                                           | Creation time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset. |
| updated                  | String                                                           | Update time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.   |
| configuration_parameters | Array of<br><a href="#">ConfigurationParameterResult</a> objects | Parameters defined by users based on a default parameter template.                                                                                                    |

**Table 5-242** ConfigurationParameterResult

| Parameter        | Type    | Description                                                                                                                                                                                                                                                          |
|------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name             | String  | Parameter name.                                                                                                                                                                                                                                                      |
| value            | String  | Parameter value.                                                                                                                                                                                                                                                     |
| restart_required | Boolean | Whether the instance needs to be restarted. The value can be: <ul style="list-style-type: none"><li>• <b>false</b>, indicating that the instance does not need to be restarted.</li><li>• <b>true</b>, indicating that the instance needs to be restarted.</li></ul> |
| readonly         | Boolean | Whether the parameter is read-only. The value can be: <ul style="list-style-type: none"><li>• <b>false</b>, indicating that the parameter is not read-only.</li><li>• <b>true</b>, indicating that the parameter is read-only.</li></ul>                             |

| Parameter   | Type   | Description                                                                                                                                                   |
|-------------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value_range | String | Value range. For example, the value of the Integer type ranges from <b>0</b> to <b>1</b> , and the value of the Boolean type is <b>true</b> or <b>false</b> . |
| type        | String | Parameter type. The value can be <b>string</b> , <b>integer</b> , <b>boolean</b> , <b>list</b> , or <b>float</b> .                                            |
| description | String | Parameter description.                                                                                                                                        |

## Example Requests

### URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/e02e76567ae04662a2753492b77f965bpr06

## Example Responses

### Status code: 200

Success

```
{
 "id" : "07fc12a8e0e94df7a3fcf53d0b5e1605pr06",
 "name" : "default-cassandra-3.11",
 "datastore_version_name" : "3.11",
 "datastore_name" : "cassandra",
 "description" : "Default parameter group for cassandra 3.11",
 "created" : "2020-03-21T04:40:51+0800",
 "updated" : "2020-03-21T04:40:51+0800",
 "configuration_parameters" : [{
 "name" : "concurrent_reads",
 "value" : "64",
 "restart_required" : true,
 "readonly" : true,
 "value_range" : "4-512",
 "type" : "integer",
 "description" : "Number of concurrent read threads."
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.8 Deleting a Parameter Template

### Function

This API is used to delete a specified parameter template.

## Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

## URI

DELETE https://{Endpoint}/v3/{project\_id}/configurations/{config\_id}

**Table 5-243** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

## Request Parameters

**Table 5-244** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

No response parameters

## Example Requests

URI example

```
DELETE https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/e02e76567ae04662a2753492b77f965bpr06
```

## Example Responses

None

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.9 Querying Instances that a Parameter Template Can Be Applied To

### Function

This API is used to query instances that a parameter template can be applied to.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

### URI

GET https://{Endpoint}/v3/{project\_id}/configurations/{config\_id}/applicable-instances

**Table 5-245** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

**Table 5-246** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <p>If <b>offset</b> is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If <b>action</b> is set to <b>filter</b>, <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data.</p> <p>The <b>offset</b> value must be a number but cannot be a negative number.</p> |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                         |
|-----------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit     | No        | Integer | <p>Maximum records to be queried.</p> <ul style="list-style-type: none"><li>• The value ranges from <b>1</b> to <b>100</b>.</li><li>• If this parameter is not transferred, the first 100 records are queried by default.</li></ul> |

## Request Parameters

**Table 5-247** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-248** Response body parameters

| Parameter | Type                                                      | Description                                                    |
|-----------|-----------------------------------------------------------|----------------------------------------------------------------|
| instances | Array of<br><a href="#">ApplicableInstanceRsp</a> objects | All instances.                                                 |
| count     | Integer                                                   | Maximum number of instances that parameters can be applied to. |

**Table 5-249** ApplicableInstanceRsp

| Parameter | Type   | Description    |
|-----------|--------|----------------|
| id        | String | Instance ID.   |
| name      | String | Instance name. |

## Example Requests

- URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/9e80bf6bbd7142f49761c07e9c32dd04pr06/applicable-instances?offset=0&limit=10
```

## Example Responses

### Status code: 200

Success

```
{
 "instances" : [{
 "id" : "f38e203908bd4fae82714e88f12600f6in06",
 "name" : "test"
 }],
 "count" : 1000
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.10 Viewing Parameter Change History of an Instance

### Function

This API is used to view change history of parameters of an instance.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

This API can be used to query only the past seven days of parameter changes.

GeminiDB Influx does not allow you to view parameter change history of single-node instances.

### URI

```
GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/configuration-histories
```

**Table 5-250** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-251** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <p>If <b>offset</b> is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If <b>action</b> is set to <b>filter</b>, <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data.</p> <p>The <b>offset</b> value must be a number but cannot be a negative number.</p> |
| limit     | No        | Integer | <p>Maximum records to be queried.</p> <ul style="list-style-type: none"><li>• The value ranges from <b>1</b> to <b>100</b>.</li><li>• If this parameter is not transferred, the first 100 records are queried by default.</li></ul>                                                                                                                           |

## Request Parameters

**Table 5-252** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-253** Response body parameters

| Parameter | Type                                                        | Description                                  |
|-----------|-------------------------------------------------------------|----------------------------------------------|
| histories | Array of<br><a href="#">ConfigurationHistoryRsp</a> objects | Change history of parameters of an instance. |

**Table 5-254** ConfigurationHistoryRsp

| Parameter      | Type    | Description                                                                                                                                                                                                                          |
|----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| parameter_name | String  | Parameter name.                                                                                                                                                                                                                      |
| old_value      | String  | Original parameter value.                                                                                                                                                                                                            |
| new_value      | String  | New parameter value.                                                                                                                                                                                                                 |
| update_result  | String  | Update result. The value can be: <ul style="list-style-type: none"><li>• <b>SUCCESS</b>, indicating that the parameter value is changed.</li><li>• <b>FAILED</b>, indicating that the parameter value fails to be changed.</li></ul> |
| applied        | Boolean | <ul style="list-style-type: none"><li>• <b>true</b> indicates the parameter change has taken effect.</li><li>• <b>false</b> indicates that the parameter change does not take effect.</li></ul>                                      |
| updated_at     | String  | Update time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                  |
| applied_at     | String  | Update time in the yyyy-MM-ddTHH:mm:ssZ format.<br><b>T</b> is the separator between calendar and hourly notation of time. <b>Z</b> indicates the time zone offset.                                                                  |

## Example Requests

- URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/c4e095105bc64797bc3be633ae7201eein10/configuration-histories?offset=0&limit=10
```

## Example Responses

### Status code: 200

Success

```
{
 "histories" : [{
 "parameter_name" : "mongos.connPoolMaxShardedConnsPerHost",
 "old_value" : "600",
 "new_value" : "500",
 "update_result" : "FAILED",
 "applied" : true,
 "updated_at" : "2022-09-20T11:17:04+0000",
 "applied_at" : "2022-09-20T11:17:04+0000"
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.11 Viewing Application Records of a Parameter Template

### Function

This API is used to view application records of a parameter template.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

After an instance is deleted, application records of the parameter template that the instance uses are also deleted.

### URI

GET [https://{{Endpoint}}/v3/{{project\\_id}}/configurations/{{config\\_id}}/applied-histories](https://{{Endpoint}}/v3/{{project_id}}/configurations/{{config_id}}/applied-histories)

**Table 5-255** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

**Table 5-256** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                   |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset.</p> <p>If <b>offset</b> is set to <i>N</i>, the resource query starts from the <i>N+1</i> piece of data. If <b>action</b> is set to <b>filter</b>, <b>offset</b> is <b>0</b> by default, indicating that the query starts from the first piece of data.</p> <p>The <b>offset</b> value must be a number but cannot be a negative number.</p> |
| limit     | No        | Integer | <p>Maximum records to be queried.</p> <ul style="list-style-type: none"><li>• The value ranges from <b>1</b> to <b>100</b>.</li><li>• If this parameter is not transferred, the first 100 records are queried by default.</li></ul>                                                                                                                           |

## Request Parameters

**Table 5-257** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code:** 200

**Table 5-258** Response body parameters

| Parameter | Type                                             | Description                                  |
|-----------|--------------------------------------------------|----------------------------------------------|
| histories | Array of <a href="#">ApplyHistoryRsp</a> objects | Application records of a parameter template. |

**Table 5-259** ApplyHistoryRsp

| Parameter      | Type   | Description                                                                                                                                                                                                                                                                                                                                                                          |
|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| instance_id    | String | Instance ID.                                                                                                                                                                                                                                                                                                                                                                         |
| instance_name  | String | Instance name.                                                                                                                                                                                                                                                                                                                                                                       |
| applied_at     | String | Effective time in the yyyy-MM-ddTHH:mm:ssZ format.<br><br>T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.                                                                                                                                                                                                                         |
| apply_result   | String | <ul style="list-style-type: none"><li>• <b>SUCCESS</b>: indicates that the parameter template is applied to the corresponding instance.</li><li>• <b>Applying</b>: indicates that the parameter template is being applied to the corresponding instance.</li><li>• <b>FAILED</b>: indicates that the parameter template fails to be applied to the corresponding instance.</li></ul> |
| failure_reason | String | Failure cause.                                                                                                                                                                                                                                                                                                                                                                       |

## Example Requests

- URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/056f86e8d480d3cb2f43c00183f75e1f/configurations/e02e76567ae04662a2753492b77f965bpr06/applied-histories?offset=0&limit=10
```

## Example Responses

### Status code: 200

Success

```
{
 "histories": [
 {
 "instance_id": "a2d0cf32db3e4f2aa3a684240e10b457in06",
 "instance_name": "test",
 "applied_at": "2022-09-20T11:17:04+0000",
 "apply_result": "SUCCESS",
 "failure_reason": ""
 }
]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.5.12 Comparing Parameter Templates

#### Function

This API is used to compare two parameter templates.

#### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

This API only compares parameter templates with one of the same node type and DB engine to learn about configurations of the current template.

#### URI

POST [https://{{Endpoint}}/v3/{{project\\_id}}/configurations/comparison](https://{{Endpoint}}/v3/{{project_id}}/configurations/comparison)

**Table 5-260** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

#### Request Parameters

**Table 5-261** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-262** Request body parameters

| Parameter               | Mandatory | Type   | Description                                         |
|-------------------------|-----------|--------|-----------------------------------------------------|
| source_configuration_id | Yes       | String | ID of the source parameter template to be compared. |

| Parameter               | Mandatory | Type   | Description                                              |
|-------------------------|-----------|--------|----------------------------------------------------------|
| target_configuration_id | Yes       | String | ID of the destination parameter template for comparison. |

## Response Parameters

Status code: 202

**Table 5-263** Response body parameters

| Parameter   | Type                                               | Description                     |
|-------------|----------------------------------------------------|---------------------------------|
| differences | Array of<br><a href="#">Table 5-264</a><br>objects | Differences between parameters. |

**Table 5-264** DiffDetails

| Parameter      | Type   | Description                                            |
|----------------|--------|--------------------------------------------------------|
| parameter_name | String | Parameter name.                                        |
| source_value   | String | Parameter value in the source parameter template.      |
| target_value   | String | Parameter value in the destination parameter template. |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/comparison
- Comparing a source parameter template with the target parameter template  
{  
  "source\_configuration\_id" : "0764fdcd949b411ba76c2b762b80c212pr06",  
  "target\_configuration\_id" : "fa42c57bb62844e490052f2ff9d5a264pr06"  
}

## Example Responses

Status code: 202

Accepted

```
{
 "differences" : [{
 "parameter_name" : "batch_size_fail_threshold_in_kb",
 "source_value" : "1000",
 "target_value" : "1000"
 }
]
```

```
 "target_value" : "5000"
 }]
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.13 Replicating a Parameter Template

### Function

This API is used to replicate a parameter template.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

The parameter template generated after replication cannot have the same name as the default parameter template or an existing template.

Only custom parameter templates can be replicated.

### URI

POST [https://{{Endpoint}}/v3/{{project\\_id}}/configurations/{{config\\_id}}/copy](https://{{Endpoint}}/v3/{{project_id}}/configurations/{{config_id}}/copy)

**Table 5-265** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| config_id  | Yes       | String | Parameter template ID.                                                                                 |

### Request Parameters

**Table 5-266** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-267** Request body parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                   |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | Yes       | String | Name of the parameter template generated after replication. The name can include a maximum of 64 characters and can contain only uppercase letters, lowercase letters, digits, hyphens (-), underscores (_), and periods (.). |
| description | No        | String | Parameter template description. The description can contain a maximum of 256 characters except the following special characters: >!<"&=' The value is left blank by default.                                                  |

## Response Parameters

**Status code: 202**

**Table 5-268** Response body parameters

| Parameter | Type   | Description                              |
|-----------|--------|------------------------------------------|
| config_id | String | ID of the replicated parameter template. |

## Example Requests

- URI example  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/e02e76567ae04662a2753492b77f965bpr06/copy
- Replicating a Parameter Template  
{  
    "name" : "paramsGroup-2434",  
    "description" : "Replicating a parameter template"  
}

## Example Responses

**Status code: 202**

Accepted

```
{
 "config_id" : "7b4e07852bd54016906e89461b3182cdpr06"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.5.14 Querying API that Support Parameter Templates

### Function

This API is used to query API that support parameter templates.

### URI

GET https://{{Endpoint}}/v3/{{project\_id}}/configurations/datastores

**Table 5-269** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

### Request Parameters

**Table 5-270** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

### Response Parameters

**Status code:** 200

**Table 5-271** Response body parameters

| Parameter  | Type                                         | Description         |
|------------|----------------------------------------------|---------------------|
| datastores | Array of <a href="#">Table 5-272</a> objects | DB API information. |

**Table 5-272** DataStoreList

| Parameter      | Type   | Description                                                                                                                                                                                                                                                                                                                                                          |
|----------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| datastore_name | String | DB API.                                                                                                                                                                                                                                                                                                                                                              |
| version        | String | DB API version.                                                                                                                                                                                                                                                                                                                                                      |
| mode           | String | Instance type. The value can be:<br><b>Cluster</b> , indicating that the instance is a GeminiDB Cassandra, GeminiDB Influx, or GeminiDB Redis replica set instance.<br><b>InfluxdbSingle</b> , indicating that the instance is a single-node GeminiDB Influx instance.<br><b>ReplicaSet</b> , indicating that the instance is a GeminiDB Mongo replica set instance. |

## Example Requests

- URI example  
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations/datastores
- Example request body  
None

## Example Responses

### Status code: 200

Success

```
{
 "datastores": [{
 "datastore_name": "mongodb",
 "mode": "ReplicaSet",
 "version": "4.0"
 }, {
 "datastore_name": "influxdb",
 "mode": "InfluxdbCluster",
 "version": "1.7"
 }, {
 "datastore_name": "cassandra",
 "mode": "ReplicaCircle",
 "version": "3.11"
 }]
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

# 5.6 Account Management

## 5.6.1 Creating a Database Account

### Function

This API is used to create a database account for a GeminiDB Redis instance.

### Constraints

- Only the GeminiDB Redis API is supported.
- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.

### URI

POST /v3/{project\_id}/redis/instances/{instance\_id}/db-users

**Table 5-273** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-274** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-275** Request body parameters

| Parameter | Mandatory | Type             | Description                                                                |
|-----------|-----------|------------------|----------------------------------------------------------------------------|
| users     | No        | Array of objects | All accounts to be created. For details, see <a href="#">Table 5-276</a> . |

**Table 5-276 UserForCreation**

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | Yes       | String           | Account name. This parameter cannot be empty. It must start with a letter and contain up to 36 characters, including only numbers, letters, hyphens (-), and underscores (_).                                                                                                                                                                                                                              |
| password  | Yes       | String           | <ul style="list-style-type: none"><li>• Account password. The password can contain 8 to 32 characters.</li><li>• The password must contain at least two of the following types: uppercase letters, lowercase letters, digits, and special characters. The following special characters are allowed: ~!@#%^*-_=+?\$_(&amp;)</li></ul> <p>Minimum length: 8 characters<br/>Maximum length: 32 characters</p> |
| databases | Yes       | Array of strings | All databases that the account has operation permissions for. Specify at least one database or set this parameter to <b>all</b> , indicating that all databases are selected.                                                                                                                                                                                                                              |
| privilege | Yes       | String           | Account permissions. The value can be: <ul style="list-style-type: none"><li>• <b>ReadOnly</b>, indicating that the account has read-only permissions.</li><li>• <b>ReadWrite</b>, indicating that the account has read and write permissions.</li></ul>                                                                                                                                                   |

## Response Parameters

**Status code: 200**

**Table 5-277** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- **URI example**  
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/redis/054e292c9880d4992f02c0196d3ein12/db-users
- Creating 2 database accounts (Set **name** of the first account to **redis1**, **password** to **\*\*\*\***, **privilege** to **ReadOnly**, and **databases** to [ "1", "2" ].  
{  
    "users" : [ {  
        "name" : "redis1",  
        "password" : "\*\*\*\*",  
        "privilege" : "ReadOnly",  
        "databases" : [ "1", "2" ]  
    }, {  
        "name" : "redis2",  
        "password" : "\*\*\*\*",  
        "privilege" : "ReadOnly",  
        "databases" : [ "1", "2" ]  
    }]  
}

## Example Responses

**Status code: 200**

Success

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.6.2 Changing Permissions for a Database Account

### Function

This API is used to change permissions for a GeminiDB Redis database account.

### Constraints

- Only the GeminiDB Redis API is supported.

- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.

## URI

PUT /v3/{project\_id}/redis/instances/{instance\_id}/db-users/privilege

**Table 5-278** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                    |
|-------------|-----------|--------|--------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                   |

## Request Parameters

**Table 5-279** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-280** Request body parameters

| Parameter | Mandatory | Type             | Description                                                                                                  |
|-----------|-----------|------------------|--------------------------------------------------------------------------------------------------------------|
| users     | No        | Array of objects | Request body for modifying permissions of a database account. For details, see <a href="#">Table 5-281</a> . |

**Table 5-281** ModifyDbUserPrivilegeRequestBody

| Parameter | Mandatory | Type   | Description   |
|-----------|-----------|--------|---------------|
| name      | Yes       | String | Account name. |

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                              |
|-----------|-----------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| privilege | Yes       | String           | Account permissions. The value can be: <ul style="list-style-type: none"><li>• <b>ReadOnly</b>, indicating that the account has read-only permissions.</li><li>• <b>ReadWrite</b>, indicating that the account has read and write permissions.</li></ul> |
| databases | No        | Array of strings | All databases that the account has access permissions for. If this parameter is not transferred, the databases remain unchanged.                                                                                                                         |

## Response Parameters

Status code: 202

**Table 5-282** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/redis/instances/3d39c18788b54a919bab633874c159df12/db-users/privilege
- Modifying permissions of the two database accounts (Set **privilege** of user **test1** to **ReadOnly**, **databases** to [ "1", "2" ], **privilege** of user **test2** to **ReadWrite**, and **databases** to [ "3", "4" ].)

```
{
 "users" : [{
 "name" : "test1",
 "privilege" : "ReadOnly",
 "databases" : ["1", "2"]
 }, {
 "name" : "test2",
 "privilege" : "ReadWrite",
 "databases" : ["3", "4"]
 }]
}
```

## Example Responses

Status code: 202

Accepted

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

### 5.6.3 Resetting the Password of a Database Account

#### Function

This API is used to reset the password for a GeminiDB Redis database account.

#### Constraints

- Only the GeminiDB Redis API is supported.
- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.

#### URI

PUT /v3/{project\_id}/redis/instances/{instance\_id}/db-users/password

**Table 5-283** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                    |
|-------------|-----------|--------|--------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                   |

#### Request Parameters

**Table 5-284** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-285** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | Yes       | String | Account name.                                                                                                                                                                                                                                                                                                                |
| password  | Yes       | String | Password to be reset. The password: <ul style="list-style-type: none"><li>• Can contain 8 to 32 characters.</li><li>• Must contain at least two of the following types: uppercase letters, lowercase letters, digits, and special characters. The following special characters are allowed: ~!@#%^*-_=+? \$()&amp;</li></ul> |

## Response Parameters

**Status code: 204**

No response parameters

## Example Requests

- URI example  
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/redis/instances/3d39c18788b54a919bab633874c159df12/db-users/password
- Resetting the password of user **db\_user1**  
{  
    "name" : "db\_user1",  
    "password" : "\*\*\*\*\*"  
}

## Example Responses

None

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.6.4 Deleting a Database Account

### Function

This API is used to delete a database account of a GeminiDB Redis instance.

### Constraints

- Only the GeminiDB Redis API is supported.
- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.

### URI

DELETE /v3/{project\_id}/redis/instances/{instance\_id}/db-users

**Table 5-286** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

### Request Parameters

**Table 5-287** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-288** Request body parameters

| Parameter | Mandatory | Type             | Description                          |
|-----------|-----------|------------------|--------------------------------------|
| names     | Yes       | Array of strings | All database accounts to be deleted. |

### Response Parameters

**Status code: 200**

**Table 5-289** Response body parameters

| Parameter | Type   | Description |
|-----------|--------|-------------|
| job_id    | String | Task ID.    |

## Example Requests

- **URI example**  
`DELETE https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/redis/instances/9136fd2a9fc405ea4674276ce36dae8in12/db-users`
- **Example request body**  
`{  
 "names" : [ "test1", "test2" ]  
}`

## Example Responses

**Status code: 200**

Success

```
{
 "job_id" : "f85104b5-4a9c-4e0f-9505-fc5409d8f7ae"
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.6.5 Obtaining the Database Account List

### Function

This API is used to obtain the GeminiDB Redis database account list.

### Constraints

- Only the GeminiDB Redis API is supported.
- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.

### URI

`GET /v3/{project_id}/redis/instances/{instance_id}/db-users`

**Table 5-290** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-291** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                     |
|-----------|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | No        | String  | Database account name. If this parameter is transferred, information about a specified account is queried. Otherwise, information about all database accounts is returned.                                                      |
| offset    | No        | Integer | <p>Index offset.</p> <ul style="list-style-type: none"><li>The query starts from the next piece of data indexed by this parameter. The value is <b>0</b> by default.</li><li>The value must be a positive integer.</li></ul>    |
| limit     | No        | Integer | <p>Maximum records to be queried.</p> <ul style="list-style-type: none"><li>The value ranges from <b>1</b> to <b>100</b>.</li><li>If this parameter is not transferred, the first 100 records are queried by default.</li></ul> |

## Request Parameters

**Table 5-292** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

Status code: 200

**Table 5-293** Response body parameters

| Parameter   | Type             | Description                                                           |
|-------------|------------------|-----------------------------------------------------------------------|
| users       | Array of objects | All database accounts. For details, see <a href="#">Table 5-294</a> . |
| total_count | Integer          | Total number of records.                                              |

**Table 5-294** DbUserInfo

| Parameter | Type             | Description                                                                                                                                                                                                                                            |
|-----------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name      | String           | Account name.                                                                                                                                                                                                                                          |
| type      | String           | Account type. The value can be: <ul style="list-style-type: none"><li>• <b>rwuser</b>, indicating that the account is an administrator account</li><li>• <b>acluser</b>, indicating that the account is a common account</li></ul>                     |
| privilege | String           | Account permissions. The value can be: <ul style="list-style-type: none"><li>• <b>ReadOnly</b>, indicating that the account has read-only permissions</li><li>• <b>ReadWrite</b>, indicating that the account has read and write permissions</li></ul> |
| databases | Array of strings | All databases that the account has access permissions for.                                                                                                                                                                                             |

## Example Requests

URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/
/v3/375d8d8fad1f43039e23d3b6c0f60a19/redis/instances/9136fd2a9fc405ea4674276ce36dae8in12/db-
users
```

## Example Responses

Status code: 200

Success

```
{
 "users": [{
 "name": "db_user1",
 "type": "rwuser",
 "privilege": "ReadWrite",
 "databases": ["1", "2"]
 }]
```

```
}, {
 "name" : "db_user2",
 "type" : "acluser",
 "privilege" : "ReadWrite",
 "databases" : ["1", "2"]
}],
"total_count" : 2
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.6.6 Obtaining All Databases in an Instance

### Function

This API is used to obtain the database list for a GeminiDB Redis instance.

### Constraints

- Only the GeminiDB Redis API is supported.
- This operation cannot be performed when the instance is in any of the following states: creating, changing specifications, changing database port, frozen, or abnormal.
- Only databases of instances that contain data are returned.

### URI

GET /v3/{project\_id}/redis/instances/{instance\_id}/databases

**Table 5-295** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

**Table 5-296** Query parameters

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                    |
|-----------|-----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | Integer | <p>Index offset</p> <ul style="list-style-type: none"><li>The query starts from the next piece of data indexed by this parameter. The value is <b>0</b> by default.</li><li>The value must be a positive integer.</li></ul>    |
| limit     | No        | Integer | <p>Maximum records to be queried</p> <ul style="list-style-type: none"><li>The value ranges from <b>1</b> to <b>100</b>.</li><li>If this parameter is not transferred, the first 100 records are queried by default.</li></ul> |

## Request Parameters

**Table 5-297** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

## Response Parameters

**Status code: 200**

**Table 5-298** Response body parameters

| Parameter   | Type             | Description                                   |
|-------------|------------------|-----------------------------------------------|
| databases   | Array of strings | All databases in the GeminiDB Redis instance. |
| total_count | Integer          | Total number of records.                      |

## Example Requests

**URI example**

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/
/v3/375d8d8fad1f43039e23d3b6c0f60a19/redis/instances/9136fd2a9fc405ea4674276ce36dae8in12/
databases
```

## Example Responses

**Status code: 200**

Success

```
{
 "databases": ["1", "2", "3"],
 "total_count": 3
}
```

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

# 5.7 Tags

## 5.7.1 Querying an Instance by Tag

### Function

This API is used to query a specified instance by tag.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

A maximum of 20 tags can be added to a DB instance. The tag key must be unique.

### URI

POST https://{Endpoint}/v3/{project\_id}/instances/resource-instances/action

**Table 5-299** Path parameters

| Parameter  | Mandatory | Type   | Description                                                                                            |
|------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |

## Request Parameters

**Table 5-300** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-301** Request body parameters

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| offset    | No        | String | <p>Index offset. The query starts from the next piece of data indexed by this parameter.</p> <ul style="list-style-type: none"><li>• If <b>action</b> is set to <b>count</b>, this parameter does not need to be transferred.</li><li>• If <b>action</b> is set to <b>filter</b>, the parameter value must be a positive integer. The default value is <b>0</b>, indicating that the query starts from the first piece of data. '</li></ul> |
| limit     | No        | String | <p>Number of records to be queried.</p> <ul style="list-style-type: none"><li>• If <b>action</b> is set to <b>count</b>, this parameter does not need to be transferred.</li><li>• If <b>action</b> is set to <b>filter</b>, the value ranges from <b>1</b> to <b>100</b>. If this parameter is not transferred, the first 100 instances are queried by default.</li></ul>                                                                  |
| action    | Yes       | String | <p>Operation identifier.</p> <ul style="list-style-type: none"><li>• If <b>action</b> is set to <b>filter</b>, instances are queried based on tag filters.</li><li>• If <b>action</b> is set to <b>count</b>, only the total number of records is returned.</li></ul>                                                                                                                                                                       |

| Parameter | Mandatory | Type                                      | Description                                                                                                                                                                                               |
|-----------|-----------|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| matches   | No        | Array of<br><b>MatchOption</b><br>objects | Search parameter. <ul style="list-style-type: none"><li>• If this parameter is not specified, the query is not based on the instance name or ID.</li><li>• This parameter cannot be left blank.</li></ul> |
| tags      | No        | Array of<br><b>TagOption</b><br>objects   | Included tags. Each tag contains a maximum of 20 keys.                                                                                                                                                    |

**Table 5-302** MatchOption

| Parameter | Mandatory | Type   | Description                                                                                                                                                       |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | Yes       | String | Query criteria. The value can be <code>instance_name</code> or <code>instance_id</code> , indicating that the query is based on the instance name or instance ID. |
| value     | Yes       | String | Name or ID of the instance to be queried                                                                                                                          |

**Table 5-303** TagOption

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                           |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | Yes       | String | Tag key. It can contain a maximum of 36 Unicode characters. The <b>key</b> value cannot be null, an empty string, or spaces. Before using <b>key</b> , delete spaces before and after the value.<br><b>NOTE</b><br>The character set of this parameter is not verified during search. |

| Parameter | Mandatory | Type             | Description                                                                                                                                                                                                                                                                                          |
|-----------|-----------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| values    | Yes       | Array of strings | Tag values. Each tag value can contain a maximum of 43 Unicode characters and cannot contain spaces. Before using <b>values</b> , delete spaces before and after the value.<br><br>If the <b>values</b> is not specified, any parameter value can be queried. All values are in the OR relationship. |

## Response Parameters

Status code: 200

**Table 5-304** Response body parameters

| Parameter   | Type                                            | Description              |
|-------------|-------------------------------------------------|--------------------------|
| instances   | Array of <a href="#">InstanceResult</a> objects | All instances.           |
| total_count | Integer                                         | Total number of records. |

**Table 5-305** InstanceResult

| Parameter     | Type                                               | Description                                                                        |
|---------------|----------------------------------------------------|------------------------------------------------------------------------------------|
| instance_id   | String                                             | Instance ID.                                                                       |
| instance_name | String                                             | Instance name.                                                                     |
| tags          | Array of <a href="#">InstanceTagResult</a> objects | All tags. If there are no tags, <b>tags</b> is taken as an empty array by default. |

**Table 5-306** InstanceTagResult

| Parameter | Type   | Description                                                                                                                                                                        |
|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | String | Tag key. The tag key must be specified and can include a maximum of 36 Unicode characters. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-). |

| Parameter | Type   | Description                                                                                                                                                                                                 |
|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| value     | String | Tag value. The tag value can contain a maximum of 43 Unicode characters and can be an empty string.<br>It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-). |

## Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/resource-instances/action
```

- Example request body

Querying an instance by name (Set **offset** to **100** and **limit** to **100**.)

```
{
 "offset": 100,
 "limit": 100,
 "action": "filter",
 "matches": [
 {"key": "instance_name",
 "value": "test-single"}],
 "tags": [
 {"key": "key1",
 "values": ["value1", "value2"]}]}
```

Querying total records

```
{
 "action": "count",
 "tags": [{
 "key": "key1",
 "values": ["value1", "value2"] } , {
 "key": "key2",
 "values": ["value1", "value2"] }],
 "matches": [{
 "key": "instance_name",
 "value": "test-single" } , {
 "key": "instance_id",
 "value": "958693039f284d6ebfb177375711072ein06" }]}
```

## Example Responses

**Status code: 200**

Success

```
{
 "total_count": 1,
 "instances": [
 {"instance_id": "2acbf2223caf3bac3c33c6153423c3ccin06",
```

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

## Status Codes

For details, see [Status Codes](#).

## Error Codes

For details, see [Error Codes](#).

## 5.7.2 Adding or Deleting Resource Tags in Batches

### Function

This API is used to add tags to or delete tags from a specified DB instance in batches.

### Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

A maximum of 20 tags can be added to an instance. The tag key must be unique.

If the request body contains duplicated keys, an error message will be reported when the API is called.

If the key in the request body is the same as an existing key in a specified instance, the value of the **value** parameter that corresponds to the existing key is overwritten.

If the tag to be deleted does not exist, the system deems the deletion operation successful by default but does not check whether the tag key and value meets character set rules.

### URI

POST [https://{{Endpoint}}/v3/{{project\\_id}}/instances/{{instance\\_id}}/tags/action](https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/tags/action)

**Table 5-307** Path parameters

| Parameter   | Mandatory | Type   | Description                                                                                            |
|-------------|-----------|--------|--------------------------------------------------------------------------------------------------------|
| project_id  | Yes       | String | Project ID of a tenant in a region. To obtain this value, see <a href="#">Obtaining a Project ID</a> . |
| instance_id | Yes       | String | Instance ID.                                                                                           |

## Request Parameters

**Table 5-308** Request header parameters

| Parameter    | Mandatory | Type   | Description |
|--------------|-----------|--------|-------------|
| X-Auth-Token | Yes       | String | User token. |

**Table 5-309** Request body parameters

| Parameter | Mandatory | Type                                                       | Description                                                                                                                                                                                         |
|-----------|-----------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| action    | Yes       | String                                                     | Operation identifier. The value can be: <ul style="list-style-type: none"><li>• <b>create</b>, indicating that tags are added.</li><li>• <b>delete</b>, indicating that tags are deleted.</li></ul> |
| tags      | Yes       | Array of <a href="#">BatchTagActionOnTagOption</a> objects | All tags.                                                                                                                                                                                           |

**Table 5-310** BatchTagActionTagOption

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| key       | Yes       | String | <p>Tag key. It can contain a maximum of 36 Unicode characters. The <b>key</b> value cannot be <b>null</b>, an empty string, or spaces. Before using <b>key</b>, delete spaces before and after the value.</p> <p>It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-).</p>                                                                                                                                                                                                                                                                       |
| value     | No        | String | <p>Tag value. The tag value can contain a maximum of 43 Unicode characters and can be an empty string.</p> <p>It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-).</p> <ul style="list-style-type: none"><li>• If <b>action</b> is set to <b>create</b>, this parameter is mandatory.</li><li>• If <b>action</b> is set to <b>delete</b>, this parameter is optional.</li></ul> <p><b>NOTE</b><br/>If <b>value</b> is specified, tags are deleted by key and value. If <b>value</b> is not specified, tags are deleted by key.</p> |

## Response Parameters

**Status code: 200**

No response parameters

## Example Requests

- **URI example**

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/tags/action
```

- **Adding two tags**

```
{
 "action" : "create",
 "tags" : [{
 "key" : "key1",
 "value" : "value1"
 }, {
```

- ```
        "key" : "key2",
        "value" : "value2"
    } ]
}
● Deleting two tags
{
    "action" : "delete",
    "tags" : [ {
        "key" : "key1"
    }, {
        "key" : "key2",
        "value" : "value3"
    } ]
}
```

Example Responses

Status code: 200

Success

```
{ }
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.7.3 Querying Tags of an Instance

Function

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

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

A maximum of 20 tags can be added to a DB instance. The tag key must be unique.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/tags

Table 5-311 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-312 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-313 Response body parameters

Parameter	Type	Description
tags	Array of ListInstanceTagsResult objects	Tags of the instance.

Table 5-314 ListInstanceTagsResult

Parameter	Type	Description
key	String	Tag key. The tag key can contain a maximum of 36 Unicode characters and must be specified. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-).
value	String	Tag value. The tag value can contain a maximum of 43 Unicode characters and can be an empty string. It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-).

Example Requests

URI example

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in02/tags
```

Example Responses

Status code: 200

Success

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

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.7.4 Querying Tags of a Specified Project

Function

This API is used to query tags of a specified project.

URI

```
GET https://{Endpoint}/v3/{project_id}/tags
```

Table 5-315 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Table 5-316 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	<p>Index offset.</p> <ul style="list-style-type: none">The query starts from the next piece of data indexed by this parameter. The value is 0 by default.The value must be a positive integer.
limit	No	Integer	<p>Maximum records to be queried.</p> <ul style="list-style-type: none">The value ranges from 1 to 100.If this parameter is not transferred, the first 100 records are queried by default.

Request Parameters

Table 5-317 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-318 Response body parameters

Parameter	Type	Description
tags	Array of Tag objects	All tags.
total_count	Integer	Total number of records.

Table 5-319 Tag

Parameter	Type	Description
type	String	Tag type. The value can be: <ul style="list-style-type: none">• user• system
key	String	Tag key. The tag key must be specified and can include a maximum of 36 Unicode characters. The key is case-sensitive and can contain digits, uppercase letters, lowercase letters, underscores (_), and hyphens (-).
values	Array of strings	Tag values. The value can include a maximum of 43 Unicode characters and can also be an empty string. The value is case-sensitive and can contain digits, uppercase letters, lowercase letters, underscores (_), periods (.), and hyphens (-).

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/tags?offset=1&limit=10

Example Responses

Status code: 200

Success

```
{  
  "tags": [ {  
    "key": "key1",  
    "values": [ "value1", "value2" ],  
    "type": "user"  
  }, {  
    "key": "key2",  
    "values": [ "value1", "value2" ],  
    "type": "system"  
  } ],  
  "total_count": 2  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8 Logs

5.8.1 Querying Database Slow Logs

Function

This API is used to query the latest 2,000 slow query logs of an instance. Searching by keyword is not supported.

Constraints

- This API supports GeminiDB Cassandra instances.
- This API can be used to query only the latest 2000 slow query logs in a specified time range.

URI

GET `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/slowlog`

Table 5-320 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID

Table 5-321 Query parameters

Parameter	Mandatory	Type	Description
start_date	Yes	String	Start time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The start time is at most 30 days earlier than the current time.

Parameter	Mandatory	Type	Description
end_date	Yes	String	<p>End time in the yyyy-mm-ddThh:mm:ssZ format.</p> <p>T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. You can only query slow query logs generated in the last one month.</p> <p>The end time cannot be later than the current time.</p>
offset	No	Integer	<p>Index offset. Its value ranges from 0 to 1999.</p> <p>If offset is set to N, the resource query starts from the N+1 piece of data. The value is 0 by default, indicating that the query starts from the first piece of data. The value cannot be a negative number.</p>
limit	No	Integer	<p>Number of records to be queried. The value ranges from 1 to 100.</p> <p>The sum of values of limit and offset must be 2000 or lower.</p>
node_id	No	String	<p>Node ID. If this parameter is not specified, all nodes of the instance are queried.</p> <p>For details about the value, see id in table Table 5-47 in Querying Instances and Details.</p>
type	No	String	<p>SQL statement type. If this parameter is not specified, all types of SQL statements are queried. You can also specify the following log type:</p> <ul style="list-style-type: none">• SELECT

Request Parameters

Table 5-322 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-323 Response body parameters

Parameter	Type	Description
slow_log_list	Array of SlowlogResult objects	Information about slow query logs.
total_record	Integer	Total number of records.

Table 5-324 SlowlogResult

Parameter	Type	Description
time	String	Execution time.
database	String	Database which slow query logs belong to.
query_sample	String	Execution syntax.
type	String	SQL statement type.
start_time	String	UTC time when logs are generated.

Example Requests

- URI example

Querying slow query logs:

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0483b6b16e954cb88930a360d2c4e663/instances/6ade8143870047b8999aba8f1891b48ein06/slowlog?start_date=2018-08-06T10:41:14+0800&end_date=2018-08-07T10:41:14+0800
```

- URI example

Querying slow query logs based on specified conditions:

```
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/6ade8143870047b8999aba8f1891b48ein06/slowlog?
```

```
type=SELECT&offset=1&limit=20&node_id=a7c84462483642798cf159237343135fno06&start_date=2018-08-06T10:41:14+0800&end_date=2018-08-07T10:41:14+0800
```

Example Responses

Status code: 200

Success

```
{  
    "total_record" : 1,  
    "slow_log_list" : [ {  
        "time" : "513 ms",  
        "database" : "cassandra",  
        "query_sample" : "SELECT * FROM cassandra.sz_user_hw LIMIT 100;",  
        "type" : "SELECT",  
        "start_time" : "2020-11-15T22:49:38.643000Z"  
    } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.2 Querying Slow Query Logs of a GeminiDB Redis Instance

Function

This API is used to query slow query logs of GeminiDB Redis instances. Searching for slow query logs by keyword is supported.

Constraints

- Operators &, ||, AND, OR, NOT, *, ?, :, >, <, =, ≥, and ≤ cannot be used to search for logs.
- The query must be within the period specified by **start_time** and **end_time**.
- The value of **line_num** must be obtained from the log information returned for the last query. This parameter is optional for the first query.
- A maximum of 100 records can be queried on each page, and slow query logs can be stored for a maximum of 30 days.

URI

POST https://{{Endpoint}}/v3/{{project_id}}/redis/instances/{{instance_id}}/slow-logs

Table 5-325 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-326 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-327 Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Start time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The start time cannot be 30 days earlier than the current time.
end_time	Yes	String	End time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The end time cannot be later than the current time.
limit	Yes	Integer	Number of logs to be queried each time. The maximum value is 100 .

Parameter	Mandatory	Type	Description
line_num	No	String	Sequence number of a log event. This parameter is not required for the first query, but is required for the next query. The value can be obtained from the response of the last query. The current query starts from the next log of line_num , excluding the log of line_num .

Parameter	Mandatory	Type	Description
operate_type	No	String	Statement type. If this parameter is left empty, all statement types are queried. The following statement types are supported: SET, GET, DEL, INCR, INCRBY, INCRBYFLOAT, DECR, DECRBY, GETSET, APPEND, MGET, KEYS, SETNX, SETEX, PSETEX, DELVX, MSET, MSETNX, GETRANGE, SUBSTR, SETRANGE, STRLEN, EXISTS, EXPIRE, PE_EXPIRE, EXPIREAT, PE_EXPIREAT, TTL, PTTL, PERSIST, TYPE, SCANX, PKSETEXAT, SORT, HDEL, HSET, HGET, HGETALL, HEXISTS, HINCRBY, HINCRBYFLOAT, HKEYS, HLEN, HMGET, HMSET, HSETNX, HSTRLEN, HVALS, HSCAN, HSCANX, PKHSCANRANGE, PKHRSCANRANGE, LINDEX, LINsert, LLEN, LPOP, LPUSH, LPUSHX, LRANGE, LREM, LSET, LTRIM, RPOP, RPOPLPUSH, RPUSH, RPUSHX, ZADD, ZCARD, ZSCAN, ZINCRBY, ZRANGE, ZREVRANGE, ZRANGEBYSCORE, ZREVRANGEBYSCORE, ZCOUNT, ZREM, ZUNIONSTORE, ZINTERSTORE, ZRANK, ZREVRANK, ZSCORE, ZRANGEBYLEX, ZREVRANGEBYLEX, ZLEXCOUNT, ZREMRANGEBYRANK, ZREMRANGEBYSCORE, ZREMRANGEBYLEX, ZPOPMAX, ZPOPMIN, SADD, SPOP, SCARD, SMEMBERS, SSCAN, SREM, SUNION, SUNIONSTORE, SINTER, SINTERSTORE, SISMEMBER, SDIFF, SDIFFSTORE, SMOVE, SRANDMEMBER, BITSET, BITGET, BITCOUNT, BITPOS, BITOP, BITFIELD, PFADD, PFCOUNT, PFMERGE, GEOADD,

Parameter	Mandatory	Type	Description
			GEORADIUSBYMEMBER, GEORADIUS, GEOHASH, GEODIST, GEOPOS, XADD, XACK, XGROUP, XDEL, XTRIM, XLEN, XRANGE, XREVRANGE, XCLAIM, XPENDING, XINFO, XREAD, and XREADGROUP.
node_id	No	String	Node ID. If this parameter is left blank, all nodes in the instance can be queried. For details about the value, see field id in Table 5-47 .
keywords	No	Array of strings	Full-text log search based on multiple keywords, indicating that all keywords are matched. <ul style="list-style-type: none">• A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 512 characters.
max_cost_time	No	Double	Logs can be searched based on the maximum execution duration. Unit: ms
min_cost_time	No	Double	Logs can be searched based on the minimum execution duration. Unit: ms

Response Parameters

Status code: 200

Table 5-328 Response body parameters

Parameter	Type	Description
slow_logs	Array of objects	Slow log information. For details, see Table 5-329 .

Table 5-329 RedisSlowLogDetail

Parameter	Type	Description
node_name	String	Node name.

Parameter	Type	Description
node_id	String	Node ID.
whole_message	String	Statement.
operate_type	String	SQL statement type.
cost_time	Double	Execution time. Unit: ms
log_time	String	UTC time when a log is generated. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
line_num	String	Sequence number of a log event.

Example Requests

```
POST  
https://{{Endpoint}}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/redis/instances/  
a6d3c8a9857b4c81b3c1fe4802dfa4d0in12/slow-logs  
  
{  
    "start_time": "2022-09-06T10:41:14+0800",  
    "end_time": "2022-09-16T10:41:14+0800",  
    "limit": 100,  
    "line_num": "1595659490239433658",  
    "operate_type": "set",  
    "node_id": "2997329fe3cb4b3faedcade16df6966eno12",  
    "keywords": [ "log", "test" ],  
    "max_cost_time": 100.12,  
    "min_cost_time": 50.12  
}
```

Example Responses

Status code: 200

Success

```
{  
    "slow_logs": [  
        {"node_name": "test_worker_node_1",  
         "node_id": "dbd0b65ed0c34125a0b04d4e5ba67e66no02",  
         "whole_message": "testDb",  
         "operate_type": "SET",  
         "cost_time": 60.12,  
         "log_time": "2022-09-15T22:49:38.643000Z",  
         "line_num": "1595659490239433659"  
    ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.3 Querying Slow Query Logs of a GeminiDB Cassandra Instance

Function

This API is used to query slow query logs of GeminiDB Cassandra instances. Searching for slow query logs by keyword is supported.

Constraints

- The following operators are supported: &&, ||, AND, OR, NOT, *, ?, :, >, <, =, ≥, and ≤
- The query must be within the period specified by **start_time** and **end_time**.
- The value of **line_num** must be obtained from the log information returned for the last query. This parameter is optional for the first query.
- A maximum of 100 records can be queried on each page, and slow query logs can be stored for a maximum of 30 days.

URI

POST `https://{{Endpoint}}/v3/{{project_id}}/cassandra/instances/{{instance_id}}/slow-logs`

Table 5-330 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-331 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-332 Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Start time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The start time cannot be 30 days earlier than the current time.
end_time	Yes	String	End time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The end time cannot be later than the current time.
limit	Yes	Integer	Number of logs to be queried each time. The maximum value is 100 .
line_num	No	String	Sequence number of a log event. This parameter is not required for the first query, but is required for the next query. The value can be obtained from the response of the last query. The current query starts from the next log of line_num , excluding the log of line_num .
operate_type	No	String	Statement type. If this parameter is left empty, all statement types are queried. The value can be select .
node_id	No	String	Node ID. If this parameter is left blank, all nodes in the instance can be queried. For details about the value, see field id in Table 5-47 .

Parameter	Mandatory	Type	Description
keywords	No	Array of strings	<p>Full-text log search based on multiple keywords, indicating that all keywords are matched.</p> <ul style="list-style-type: none">• A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 512 characters.
keyspace_keywords	No	Array of strings	<p>Fuzzy search for logs based on multiple keyspace keywords, indicating that at least one keyword is matched.</p> <ul style="list-style-type: none">• Only fuzzy search by keyword prefix is supported. A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 48 characters.
table_keywords	No	Array of strings	<p>Fuzzy search for logs based on multiple database table name keywords, indicating that at least one keyword is matched.</p> <ul style="list-style-type: none">• Only fuzzy search by keyword prefix is supported. A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 48 characters.
max_cost_time	No	Integer	Logs can be searched based on the maximum execution duration. Unit: ms
min_cost_time	No	Integer	Logs can be searched based on the minimum execution duration. Unit: ms

Response Parameters

Status code: 200

Table 5-333 Response body parameters

Parameter	Type	Description
slow_logs	Array of objects	Slow log information. For details, see Table 5-334 .

Table 5-334 CassandraSlowLogDetail

Parameter	Type	Description
node_name	String	Node name.
node_id	String	Node ID.
whole_message	String	Statement.
operate_type	String	Statement type.
cost_time	Integer	Execution time. Unit: ms
keyspace	String	Database keyspace.
table	String	Table name.
log_time	String	UTC time when a log is generated. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
line_num	String	Sequence number of a log event.

Example Requests

```
POST https://[Endpoint]/v3/619d3e78f61b4be68bc5aa0b59edcf7b/cassandra/instances/853f97101a9a4f618202f281cda82e92in06/slow-logs
```

```
{  
    "start_time" : "2023-01-06T10:41:14+0800",  
    "end_time" : "2023-01-10T10:41:14+0800",  
    "limit" : 100,  
    "line_num" : "1595659490239433658",  
    "operate_type" : "select",  
    "node_id" : "8b76c35e91eb4c9d82fe25417d750cb5no06",  
    "keywords" : [ "log", "test" ],  
    "keyspace_keywords" : [ "system", "system_auth" ],  
    "table_keywords" : [ "test" ],  
    "max_cost_time" : 100,  
    "min_cost_time" : 50  
}
```

Example Responses

Status code: 200

Success

```
{  
  "slow_logs": [ {  
    "node_name": "test_priam_node_1",  
    "node_id": "8b76c35e91eb4c9d82fe25417d750cb5no06",  
    "keyspace": "system",  
    "table": "test",  
    "whole_message": "GqKc6_S",  
    "operate_type": "select",  
    "cost_time": 60,  
    "log_time": "2023-01-09T05:42:32.000+0000",  
    "line_num": "1595659490239433659"  
  } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.4 Querying Slow Query Logs of a GeminiDB Mongo Instance

Function

This API is used to query slow query logs of GeminiDB Mongo instances. Searching for slow query logs by keyword is supported.

Constraints

- The following operators are supported: &&, ||, AND, OR, NOT, *, ?, :, >, <, =, ≥, and ≤
- The query must be within the period specified by **start_time** and **end_time**.
- The value of **line_num** must be obtained from the log information returned for the last query. This parameter is optional for the first query.
- A maximum of 100 records can be queried on each page, and slow query logs can be stored for a maximum of 30 days.

URI

POST https://{{Endpoint}}/v3/{{project_id}}/mongodb/instances/{{instance_id}}/slow-logs

Table 5-335 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-336 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-337 Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Start time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The start time cannot be 30 days earlier than the current time.
end_time	Yes	String	End time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The end time cannot be later than the current time.
limit	Yes	Integer	Number of logs to be queried each time. The maximum value is 100 .
line_num	No	String	Sequence number of a log event. This parameter is not required for the first query, but is required for the next query. The value can be obtained from the response of the last query. The current query starts from the next log of line_num , excluding the log of line_num .

Parameter	Mandatory	Type	Description
operate_type	No	String	<p>Statement type. If this parameter is left empty, all statement types are queried.</p> <p>Value options:</p> <ul style="list-style-type: none">• insert• query• update• remove• getmore• command• killcursors
node_id	No	String	<p>Node ID. If this parameter is left blank, all nodes in the instance can be queried. For details about the value, see field id in Table 5-47.</p>
keywords	No	Array of strings	<p>Full-text log search based on multiple keywords, indicating that all keywords are matched.</p> <ul style="list-style-type: none">• A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 512 characters.
database_keywords	No	Array of strings	<p>Fuzzy search for logs based on multiple database name keywords, indicating that at least one keyword is matched.</p> <ul style="list-style-type: none">• Only fuzzy search by keyword prefix is supported. A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 64 characters.

Parameter	Mandatory	Type	Description
collection_key words	No	Array of strings	Fuzzy search for logs based on multiple database collection name keywords, indicating that at least one keyword is matched. <ul style="list-style-type: none">• Only fuzzy search by keyword prefix is supported. A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 128 characters.
max_cost_time	No	Integer	Logs can be searched based on the maximum execution duration. Unit: ms
min_cost_time	No	Integer	Logs can be searched based on the minimum execution duration. Unit: ms

Response Parameters

Status code: 200

Table 5-338 Response body parameters

Parameter	Type	Description
slow_logs	Array of objects	Slow log information. For details, see Table 5-339 .

Table 5-339 MongodbSlowLogDetail

Parameter	Type	Description
node_name	String	Node name.
node_id	String	Node ID.
whole_message	String	Statement.
operate_type	String	Statement type.
cost_time	Integer	Execution time. Unit: ms
lock_time	Integer	Lock wait time. Unit: μ s

Parameter	Type	Description
docs_returned	Integer	Number of documents returned by a slow query.
docs_scanned	Integer	Number of documents scanned during a slow query.
database	String	Database name.
collection	String	Database collection name.
log_time	String	UTC time when a log is generated. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
line_num	String	Sequence number of a log event.

Example Requests

```
POST https://{Endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/mongodb/instances/916de02c35fe4abaa3e707ebd916d3f8in10/slow-logs
```

```
{  
    "start_time" : "2021-01-06T10:41:14+0800",  
    "end_time" : "2023-01-10T10:41:14+0800",  
    "limit" : 100,  
    "line_num" : "1595659490239433658",  
    "operate_type" : "query",  
    "node_id" : "dfe41edcb2a1483c96ddf61cc0cee237no10",  
    "keywords" : [ "response", "oplog" ],  
    "database_keywords" : [ "testDB", "system_auth" ],  
    "collection_keywords" : [ "testCollection" ],  
    "max_cost_time" : 100,  
    "min_cost_time" : 50  
}
```

Example Responses

Status code: 200

Success

```
{  
    "slow_logs" : [ {  
        "node_name" : "test_replica_node_1",  
        "node_id" : "dfe41edcb2a1483c96ddf61cc0cee237no10",  
        "database" : "testDB",  
        "collection" : "testCollection",  
        "whole_message" : "{\"$date\" : 1605480486800, \"$ninserted\" : 1, \"$locks\" : {\"oplog\" : {\"acquireCount\" : {\"w\" : 1}, \"Global\" : {\"acquireCount\" : {\"r\" : 3, \"w\" : 2}}, \"Collection\" : {\"acquireCount\" : {\"w\" : 2}}, \"Database\" : {\"acquireCount\" : {\"w\" : 3}}}, \"$numYield\" : 0, \"$ns\" : \"geographySpace.tiles\"},  
        "operate_type" : "query",  
        "cost_time" : 60,  
        "lock_time" : 10,  
        "docs_returned" : 0,  
        "docs_scanned" : 0,  
        "log_time" : "2023-01-09T06:42:32.000+0000",  
        "line_num" : "1595659490239433659"  
    } ]  
}
```

```
    } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.5 Querying Database Error Logs

Function

This API is used to query error logs of an instance. Searching for error logs by keyword is not supported.

Constraints

This API supports GeminiDB Mongo instances.

The latest 2,000 error logs can be queried.

The past one month of error logs can be queried.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/error-log

Table 5-340 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID, which can be obtained by calling the API described in Querying Instances and Details . If there are no instances available, call the API described in Creating an Instance to create one.

Table 5-341 Query parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	<p>Start time in the yyyy-mm-ddThh:mm:ssZ format.</p> <p>T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset.</p> <p>The start time is at most 30 days earlier than the current time.</p>
end_time	Yes	String	<p>End time in the yyyy-mm-ddThh:mm:ssZ format.</p> <p>T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset.</p> <p>Only error logs generated in the past month can be queried.</p> <p>The end time cannot be later than the current time.</p>
node_id	No	String	Node ID. If this parameter is left blank, all nodes in the instance can be queried.
type	No	String	<p>Statement type. If this parameter is left empty, all statement types are queried.</p> <p>The following log types are supported:</p> <ul style="list-style-type: none">• Warning• Error
offset	No	Integer	<p>Index offset.</p> <ul style="list-style-type: none">• Its value ranges from 0 to 1999. If offset is set to N, the resource query starts from the N+1 piece of data. If action is set to filter, offset is 0 by default, indicating that the query starts from the first piece of data.• The value must be a positive integer.

Parameter	Mandatory	Type	Description
limit	No	Integer	<p>Number of records to be queried.</p> <ul style="list-style-type: none">• The value ranges from 1 to 100. The default value is 10, indicating that 10 records are returned by default.• The sum of limit and offset values must be less than or equal to 2000.

Request Parameters

Table 5-342 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-343 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records.
error_log_list	Array of Table 5-344 objects	Error log information.

Table 5-344 ErrorLogList

Parameter	Type	Description
node_name	String	Node name.
level	String	Log level.
time	String	UTC time when logs are generated.
content	String	Log content.

Example Requests

- URI example
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in10/error-log
- Example request body
None

Example Responses

Status code: 200

Success

```
{  
  "error_log_list" : [ {  
    "node_name" : "Test_replica_node_2",  
    "level" : "WARNING",  
    "time" : "2020-12-15T08:53:01.868+0000",  
    "content" : "W NETWORK [LogicalSessionCacheReap] Unable to reach primary for set replica"  
  } ],  
  "total_count" : 1  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.6 Querying Error Logs of a GeminiDB Mongo Instance

Function

This API is used to query error logs of GeminiDB Mongo instances. Searching for error logs by keyword is supported.

Constraints

- The following operators are supported: &&, ||, AND, OR, NOT, *, ?, :, >, <, =, ≥, and ≤
- The query must be within the period specified by **start_time** and **end_time**.
- The value of **line_num** must be obtained from the log information returned for the last query. This parameter is optional for the first query.
- A maximum of 100 records can be queried on each page, and error logs can be stored for a maximum of 30 days.

URI

POST https://{Endpoint}/v3/{project_id}/mongodb/instances/{instance_id}/error-logs

Table 5-345 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-346 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-347 Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Start time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The start time cannot be 30 days earlier than the current time.
end_time	Yes	String	End time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. The end time cannot be later than the current time.
limit	Yes	Integer	Number of logs to be queried each time. The maximum value is 100 .

Parameter	Mandatory	Type	Description
line_num	No	String	Sequence number of a log event. This parameter is not required for the first query, but is required for the next query. The value can be obtained from the response of the last query. The current query starts from the next log of line_num , excluding the log of line_num .
severity	No	String	Log level. If this parameter is left blank, logs of all levels can be queried. Value options: <ul style="list-style-type: none">• Warning• Error
node_id	No	String	Node ID. If this parameter is left blank, all nodes in the instance can be queried. For details about the value, see field id in Table 5-47 .
keywords	No	Array of strings	Full-text log search based on multiple keywords, indicating that all keywords are matched. <ul style="list-style-type: none">• A maximum of 10 keywords are supported.• Each keyword can contain a maximum of 512 characters.

Response Parameters

Status code: 200

Table 5-348 Response body parameters

Parameter	Type	Description
error_logs	Array of objects	Error log details. For details, see Table 5-349 .

Table 5-349 MongodbErrorLogDetail

Parameter	Type	Description
node_name	String	Node name.
node_id	String	Node ID.
raw_message	String	Error description.
severity	String	Log level.
log_time	String	UTC time when a log is generated. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
line_num	String	Sequence number of a log event.

Example Requests

```
POST https://[Endpoint]/v3/619d3e78f61b4be68bc5aa0b59edcf7b/mongodb/instances/916de02c35fe4abaa3e707ebd916d3f8in10/error-logs
```

```
{
  "start_time" : "2023-01-06T10:41:14+0800",
  "end_time" : "2023-01-10T10:41:14+0800",
  "limit" : 100,
  "line_num" : "1595659490239433658",
  "severity" : "Warning",
  "node_id" : "dfe41edcb2a1483c96ddf61cc0cee237no10",
  "keywords" : [ "error" ]
}
```

Example Responses

Status code: 200

Success

```
{
  "error_logs" : [ {
    "node_name" : "test_replica_node_1",
    "node_id" : "dfe41edcb2a1483c96ddf61cc0cee237no10",
    "raw_message" : "W TEST [test001] test error log",
    "severity" : "Warning",
    "log_time" : "2023-01-09T12:55:39.398+0000",
    "line_num" : "1595659490239433659"
  } ]
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.7 Setting the Desensitization Status of Slow Query Logs

Function

This API is used to set the desensitization status of slow query logs.

Constraints

This API supports the following types of instances:

- GeminiDB Mongo

After desensitization is disabled, it cannot be enabled.

URI

PUT https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/slowlog-desensitization

Table 5-350 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID, which can be obtained by calling the API described in Querying Instances and Details . If there are no instances available, call the API described in Creating an Instance to create one.

Request Parameters

Table 5-351 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-352 Request body parameters

Parameter	Mandatory	Type	Description
desensitization_status	Yes	String	Whether slow query log desensitization is enabled. The value can be: <ul style="list-style-type: none">• off, indicating that desensitization is disabled.

Response Parameters

Status code: 204

No response parameters

Example Requests

- **URI example**
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/9136fd2a9fc405ea4674276ce36dae8in10/slowlog-desensitization
- **Disabling data masking**
{
 "desensitization_status" : "off"
}

Example Responses

None

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.8 Querying the Desensitization Status of Slow Query Logs

Function

This API is used to query the desensitization status of slow query logs.

Constraints

This API supports GeminiDB Mongo instances.

URI

GET https://{Endpoint}/v3/{project_id}/instances/{instance_id}/slowlog-desensitization

Table 5-353 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-354 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-355 Response body parameters

Parameter	Type	Description
desensitization_status	String	Whether slow query log desensitization is enabled. The value can be: <ul style="list-style-type: none">• on, indicating that desensitization is enabled.• off, indicating that desensitization is disabled.

Example Requests

- URI example
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/094424666ef04f79a2dfbe9f5b8b31a5in06/slowlog-desensitization
- Example request body
None

Example Responses

Status code: 200

Success

```
{  
    "desensitization_status" : "on"  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.9 Associating Instances with an LTS Log Stream

Function

- After you have associated instances with a Log Tank Service (LTS) log stream, logs of these instances are automatically uploaded to the associated LTS log stream.
- You will be billed for log reporting. See LTS pricing details.
- After a specific log stream is selected, the system creates structuring configurations of the required log type for it. If there are already structuring configurations of another log type in the log stream, they will be overwritten.

Constraints

- This function supports only slow query logs and audit logs of GeminiDB Redis instances.
- This function is only available to instances of the latest kernel version.
- This operation cannot be performed on instances in the creating, deleted, or frozen state.
- A maximum of 100 instances can be associated with an LTS log stream in a batch.

URI

POST https://{Endpoint}/v3/{project_id}/instances/logs/lts-configs

Table 5-356 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

Table 5-357 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.
X-Language	No	String	Language.

Table 5-358 Request body parameters

Parameter	Mandatory	Type	Description
instance_ids	Yes	Array of strings	IDs of the instances to be associated with an LTS log stream.
log_type	Yes	String	Log type. The value can be: <ul style="list-style-type: none">• slow_log, indicating that the log is a slow query log.• audit_log, indicating that the log is an audit log.
lts_group_id	Yes	String	LTS log group ID. You can obtain the value using the LTS API for querying all log groups under an account.
lts_stream_id	Yes	String	LTS log stream ID. You can obtain the value using the LTS API for querying all log streams in a specified log group.

Response Parameters

Status code: 200

No response parameters

Example Requests

- **URI example**
POST https://[Endpoint]/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/logs/lts-configs
- **Associating instances with an LTS log stream that supports slow query logs**

```
{  
    "instance_ids" : [ "fe45815ce8a6413ab7fa290da1db1614in12",  
                      "362b42f769ff45d884e1866f8ee00bb4in12" ],  
    "log_type" : "slow_log",  
    "lts_group_id" : "65442dd4-b8de-4e9f-8a80-b60aa0698354",  
    "lts_stream_id" : "5992dd29-fd11-4228-a852-5f6e578789c5"  
}
```

- Associating instances with an LTS log stream that supports audit logs

```
{  
    "instance_ids" : [ "fe45815ce8a6413ab7fa290da1db1614in12",  
                      "362b42f769ff45d884e1866f8ee00bb4in12" ],  
    "log_type" : "audit_log",  
    "lts_group_id" : "65442dd4-b8de-4e9f-8a80-b60aa0698354",  
    "lts_stream_id" : "5992dd29-fd11-4228-a852-5f6e578789c5"  
}
```

Example Responses

Status code: 200

Success

```
{}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.10 Disassociating Instances from an LTS Log Stream

Function

After you have disassociated instances from an LTS log stream, logs of these instances are not automatically uploaded to the associated LTS log stream.

Constraints

- This function supports only slow query logs and audit logs of GeminiDB Redis instances.

URI

DELETE https://{Endpoint}/v3/{project_id}/instances/logs/lts-configs

Table 5-359 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

Table 5-360 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.
X-Language	No	String	Language.

Table 5-361 Request body parameters

Parameter	Mandatory	Type	Description
instance_ids	Yes	Array of strings	IDs of the instances to be disassociated from an LTS log stream.
log_type	Yes	String	Log type. The value can be: <ul style="list-style-type: none">• slow_log, indicating that the log is a slow query log.• audit_log, indicating that the log is an audit log.

Response Parameters

Status code: 200

No response parameters

Example Requests

- URI example
DELETE https://[Endpoint]/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/logs/lts-configs
- Disassociating instances from an LTS log stream that supports slow query logs
{
 "instance_ids" : ["fe45815ce8a6413ab7fa290da1db1614in12",
 "362b42f769ff45d884e1866f8ee00bb4in12"],
 "log_type" : "slow_log"
}
- Disassociating instances from an LTS log stream that supports audit logs
{
 "instance_ids" : ["fe45815ce8a6413ab7fa290da1db1614in12",
 "362b42f769ff45d884e1866f8ee00bb4in12"],
 "log_type" : "audit_log"
}

Example Responses

Status code: 200

Success



Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.8.11 Querying LTS Log Configurations

Function

This API is used to query the LTS configuration of instances.

Constraints

- This function supports only slow query logs and audit logs of GeminiDB Redis instances.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/instances/logs/lts-configs

Table 5-362 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain this value, see Obtaining a Project ID .

Table 5-363 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Index offset. The query starts from the next piece of data indexed by this parameter. The offset value must be a positive integer. The default value is 0 , indicating that the query starts from the first piece of data.

Parameter	Mandatory	Type	Description
limit	No	Integer	Maximum returned records. The value must be an integer ranging from 1 to 100 . If this parameter is not transferred, information of 100 instances is queried by default.
instance_id	No	String	Instance ID used for exact search.
instance_name	No	String	Instance name used for fuzzy search.
enterprise_project_id	No	String	Enterprise project ID for exact search.

Request Parameters

Table 5-364 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.
X-Language	No	String	Language.

Response Parameters

Status code: 200

Table 5-365 Response body parameters

Parameter	Type	Description
total_count	Integer	Total instance records.
instance_lts_configs	Array of objects	LTS log configurations of the instance. For details, see Table 5-366 .

Table 5-366 InstanceLogConfig

Parameter	Type	Description
instance	object	Instance information. For details, see Table 5-367 .

Parameter	Type	Description
lts_configs	Array of objects	LTS log configuration details. If the LTS log stream is not configured, this parameter is not returned. For details, see Table 5-369 .

Table 5-367 LogInstanceInfo

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
status	String	Instance status. The value can be: <ul style="list-style-type: none">• normal, indicating that the instance is running normally.• abnormal, indicating that the instance is abnormal.• creating, indicating that the instance is being created.• frozen, indicating that the instance is frozen.• data_disk_full, indicating that the instance disk is full.• createfail, indicating that the instance failed to be created.• enlargefail, indicating that nodes failed to be added to the instance.
mode	String	Instance type. The value can be: <ul style="list-style-type: none">• Cluster, indicating that the instance is aGeminiDB Redis replica set instance.
datastore	object	Database information. For details, see Table 5-368 .
actions	Array of strings	Operation that is executed on the instance.
enterprise_project_id	String	Enterprise project ID.
supported_log_types	Array of strings	Supported log type. The value can be: <ul style="list-style-type: none">slow_log, indicating that the log is a slow query log.audit_log, indicating that the log is an audit log.

Table 5-368 InstancesDatastoreResult

Parameter	Type	Description
type	String	DB API.
version	String	DB version number.

Table 5-369 InstanceLogConfigDetail

Parameter	Type	Description
log_type	String	Log type. The value can be: <ul style="list-style-type: none">• slow_log, indicating that the log is a slow query log.• audit_log, indicating that the log is an audit log.
lts_group_id	String	ID of the LTS log group. If enabled is set to false , this parameter indicates the ID of the latest associated LTS log group.
lts_stream_id	String	ID of the LTS log stream. If enabled is set to false , this parameter indicates the ID of the latest associated LTS log stream.
enabled	Boolean	Whether LTS log stream is enabled. <ul style="list-style-type: none">• true: enabled• false: disabled

Example Requests

```
GET https://[Endpoint]/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/logs/lts-configs?  
limit=10&offset=0&instance_id=362b42f769ff45d884e1866f8ee00bb4in12&instance_name=c316&enterprise_<br/>project_id=0
```

Example Responses

Status code: 200

Success

```
{  
    "total_count" : 1,  
    "instance_lts_configs" : [ {  
        "instance" : {  
            "id" : "362b42f769ff45d884e1866f8ee00bb4in12",  
            "name" : "nosql-c316",  
            "mode" : "RedisCluster",  
            "datastore" : {  
                "version" : "5.0",  
                "type" : "redis"  
            },  
            "status" : "normal",  
            "actions" : [ "GROWING" ],  
            "lts_configs" : [ {  
                "log_type" : "audit_log",  
                "lts_group_id" : "362b42f769ff45d884e1866f8ee00bb4in12",  
                "lts_stream_id" : "362b42f769ff45d884e1866f8ee00bb4in12",  
                "enabled" : true  
            } ]  
        }  
    } ]  
}
```

```
        "enterprise_project_id" : "0",
        "supported_log_types" : [ "slow_log", "audit_log" ]
    },
    "lts_configs" : [ {
        "log_type" : "slow_log",
        "lts_group_id" : "65442dd4-b8de-4e9f-8a80-b60aa0698354",
        "lts_stream_id" : "5992dd29-fd11-4228-a852-5f6e578789c5",
        "enabled" : true
    } ]
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.9 Quotas

5.9.1 Querying Quota

Function

This API is used to query GeminiDB resource quotas of a tenant.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/quotas

Table 5-370 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

Table 5-371 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-372 Response body parameters

Parameter	Type	Description
quotas	ShowResourcesListResponseBody object	Quota information.

Table 5-373 ShowResourcesListResponseBody

Parameter	Type	Description
resources	Array of ShowResourcesDetailResponseBody objects	All resources.

Table 5-374 ShowResourcesDetailResponseBody

Parameter	Type	Description
type	String	Quota resource type. Only the instance type is supported.
quota	Integer	Current quota. If this parameter is set to 0, no quantity limit is set for resources.
used	Integer	Number of used resources.

Example Requests

URI example

GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/quotas

Example Responses

Status code: 200

Success

```
{  
  "quotas": {  
    "resources": [ {  
      "type": "instance",  
      "quota": 200,  
      "used": 0  
    } ]  
  }  
}
```

```
        "used" : 58
    }
}
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10 Disaster Recovery

5.10.1 Querying Regions Where a Dual-Active Relationship Can Be Created Between Two Instances

Function

This API is used to query the regions where a dual-active relationship can be created between two instances.

Constraints

This API supports GeminiDB Redis and GeminiDB Cassandra instances.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/disaster-recovery/regions

Table 5-375 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-376 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-377 Response body parameters

Parameter	Type	Description
region_codes	Array of strings	Region where a dual-active relationship can be created between two instances. The creation of a dual-active instance is contingent on network configurations and necessary conditions. A dual-active relationship is not necessarily created between two instances even though there are available regions as such.

Example Requests

URI example

```
GET https://{{Endpoint}}/v3/2900b7b8d03e4619b8db8d43bc6234ee/instances/  
3149aee486d748f68db1ee81e95b9f56in06/disaster-recovery/regions
```

Example Responses

Status code: 200

Success.

```
{  
    "region_codes" : [ "cn-north-4" ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.2 Checking Whether a DR Relationship Can Be Created with or Deleted from a Specified Instance

Function

This API is used to check whether a DR relationship can be created with or deleted from a specified instance. If a success status code is returned, a DR relationship can be created with or deleted from a specified instance.

A DR relationship can be created between or deleted from two instances only when this API is successfully called for both of the instances.

Constraints

This API supports GeminiDB Redis instances.

URI

POST https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/disaster-recovery/precheck

Table 5-378 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-379 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-380 Request body parameters

Parameter	Mandatory	Type	Description
operation	Yes	String	Specific DR operation during the pre-check. The options are as follows: <ul style="list-style-type: none">• construction: indicates that a DR relationship is created between two instances.• deconstruction: indicates that a DR relationship is deleted from two instances.

Parameter	Mandatory	Type	Description
disaster_recovery_instance	No	object	<p>Information about the DR instance. For details, see Table 5-381.</p> <p>NOTE</p> <ul style="list-style-type: none">When operation is set to construction, this parameter must be passed.When operation is set to deconstruction, transferring this parameter is not required.

Table 5-381 TargetDisasterRecoveryInstance

Parameter	Mandatory	Type	Description
node_ips	Yes	Array of strings	IP addresses of all nodes of the DR instance.
spec_code	Yes	String	Specification code of the DR instance.
vpc_cidr	Yes	String	VPC CIDR block of the DR instance.

Response Parameters

Status code: 204

No response parameters

Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/054e292c9880d4992f02c0196d3ein12/disaster-recovery/precheck
```

- Creating a DR relationship with a specified instance

```
{  
    "operation" : "construction",  
    "disaster_recovery_instance" :{  
        "node_ips" : [ "10.0.1.2", "10.0.1.3", "10.0.1.4" ],  
        "spec_code" : "geminidb.redis.xlarge.4",  
        "vpc_cidr" : "10.0.0.0/16"  
    }  
}
```

- Deleting a DR relationship from a specific instance

```
{  
    "operation" : "deconstruction"  
}
```

Example Responses

None

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.3 Creating a DR Relationship with a Specified Instance

Function

This API is used to create a DR relationship with a specified instance.

A DR relationship is created between two instances only after this API is successfully called for both of the instances, respectively.

Constraints

This API supports GeminiDB Redis instances.

A DR relationship cannot be created between two instances in a CIDR block starting with 192 or 172.

The port number of the DR instance must be 8635.

URI

POST https://[{Endpoint}](#)/v3/[{project_id}](#)/instances/[{instance_id}](#)/disaster-recovery/construction

Table 5-382 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-383 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-384 Request body parameters

Parameter	Mandatory	Type	Description
id	No	String	DR relationship ID. This parameter is not passed when a DR relationship is created for an instance whose DR role is primary. A DR relationship ID is generated after a success response is returned. This parameter is mandatory when a DR relationship is created for an instance whose DR role is standby. The value of this parameter must be the same as the generated DR relationship ID.
alias	Yes	String	Alias of the created DR relationship.
password	Yes	String	Password for creating a DR relationship. Make sure to pass the same password when you invoke the API twice to create a DR relationship. This password is used for internal data communication within the DR cluster and cannot be used for client connection.
instance_role	Yes	String	Instance role for DR. The value can be master or slave , indicating that the instance role for DR is primary or standby.
disaster_recovery_instance	Yes	object	Information about the DR instance. For details, see Table 5-385 .

Table 5-385 DisasterRecoveryInstance

Parameter	Mandatory	Type	Description
id	Yes	String	DR instance ID.

Parameter	Mandatory	Type	Description
region_code	Yes	String	Code of the region where the DR instance is located.
subnet_cidrs	Yes	Array of strings	CIDR blocks of the subnet where the DR instance is located.
node_ips	Yes	Array of strings	IP addresses of all nodes of the DR instance.

Response Parameters

Status code: 202

Table 5-386 Response body parameters

Parameter	Type	Description
job_id	String	ID of the job that creates the DR relationship
disaster_recovery_id	String	DR relationship ID

Example Requests

- URI example
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/054e292c9880d4992f02c0196d3ein12/disaster-recovery/construction
- Creating a DR relationship with a specified instance (Set **alias** to **Video business DR**, **password** to *********, and **instance_role** to **master**.)

```
{  
    "alias" : "Video business DR"  
    "password" : "*****",  
    "instance_role" : "master",  
    "disaster_recovery_instance" : {  
  
        "region_code" : "ap-southeast-1",  
  
        "id" : "430e7468a309459eb83c5981001415dein12",  
        "subnet_cidrs" : [ "10.0.1.0/24" ],  
        "node_ips" : [ "10.0.1.2", "10.0.1.3", "10.0.1.4" ]  
    }  
}
```

Example Responses

Status code: 202

Accepted

```
{  
    "job_id" : "c010abdo-48cf-4fa8-8cbc-090f093eaa2f",
```

```
        "disaster_recovery_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"  
    }
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.4 Deleting a DR Relationship from a Specific Instance

Function

This API is used to delete a DR relationship from a specified instance.

A DR relationship is deleted between two instances only after this API is successfully called for both of the instances, respectively.

Constraints

This API supports GeminiDB Redis instances.

URI

POST https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/disaster-recovery/deconstruction

Table 5-387 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-388 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 202

Table 5-389 Response body parameters

Parameter	Type	Description
job_id	String	ID of the job that deletes the DR relationship.

Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/054e292c9880d4992f02c0196d3ein12/disaster-recovery/deconstruction
```

Example Responses

Status code: 202

Accepted

```
{  
    "job_id" : "c010abd0-48cf-4fa8-8cbc-090f093eaa2f"  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.5 Obtaining Role Information of a DR Instance

Function

This API is used to obtain role information of a DR instance for role switchover.

Constraints

This API supports GeminiDB Redis instances.

URI

```
GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/instance-role
```

Table 5-390 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-391 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-392 Response body parameters

Parameter	Type	Description
role	String	Instance role. Option master indicates that the role of the DR instance is primary, and option slave indicates that the role of the DR instance is standby.

Example Requests

- Obtaining the primary instance
 - URI example
GET https://[Endpoint]/v3/054e292c9880d4992f02c0196d3ea468/instances/341f3291813f4fb6a523a8448aa86570in12/instance-role
- Obtaining the standby instance
 - URI example
GET https://[Endpoint]/v3/054e292c9880d4992f02c0196d3ea468/instances/419bdeb827c8419e88bb37f50e36c2e1in12/instance-role

Example Responses

Status code: 200

Success

Primary instance

```
{  
    "role" : "master"  
}
```

Standby instance

```
{  
    "role" : "slave"  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.6 Promoting a DR Instance from Standby to Primary

Function

This API is used to promote a DR instance from standby to primary.

Constraints

This API supports GeminiDB Redis instances.

To promote a DR instance from standby to primary normally, you need to call the API for switching a DR instance from primary to standby and then deliver the command for promoting the standby to a primary.

Promoting a DR instance from standby to primary forcibly is used to quickly restore services when the primary instance is abnormal. You do not need to perform operations on the original primary instance.

URI

POST https://{Endpoint}/v3/{project_id}/instances/{instance_id}/switchover-master

Table 5-393 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-394 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-395 Request body parameters

Parameter	Mandatory	Type	Description
force	No	Boolean	Whether the standby instance is forced to stay primary. The value can be: true , indicating that the standby instance is forcibly promoted to a special primary instance for handling reads and writes independently when the primary instance becomes abnormal. false , indicating that the standby instance is slowly promoted to primary when the primary instance is normal.

Response Parameters

Status code: 202

Table 5-396 Response body parameters

Parameter	Type	Description
job_id	String	ID of the job of promoting a DR instance from standby to primary.

Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/054e292c9880d4992f02c0196d3ein12/switchover-master
{
    "force": true
}
```

Example Responses

Status code: 202

Accepted

```
{
    "job_id": "20f793fd-2703-4339-bfb5-f1c9065b15c8"
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.7 Demoting a DR Instance from Primary to Standby

Function

This API is used to demote a DR instance from primary to standby.

Constraints

This API supports GeminiDB Redis instances.

URI

POST `https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/switchover-slave`

Table 5-397 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-398 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 202

Table 5-399 Response body parameters

Parameter	Type	Description
job_id	String	ID of the job of promoting a DR instance from standby to primary.

Example Requests

- URI example

```
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/instances/054e292c9880d4992f02c0196d3ein12/switchover-slave
```

Example Responses

Status code: 202

Accepted

```
{ "job_id" : "20f793fd-2703-4339-bfb5-f1c9065b15c8" }
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.8 Pausing/Resuming Data Synchronization Between Two Instances with a DR Relationship

Function

This API is used to pause or resume data synchronization between two instances with a DR relationship.

Data synchronization is paused or resumed only after this API is successfully called for both of the instances, respectively.

Constraints

- This API supports GeminiDB Redis instances.
- This API can be called on the condition that two instances with a DR relationship should be a primary and standby instance, respectively and should be both in the normal status.
- This API can be called to only when data synchronization stops for both instances between which there is a DR relationship.

URI

POST https://{Endpoint}/v3/{project_id}/instances/{instance_id}/disaster-recovery/data-synchronization

Table 5-400 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-401 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Table 5-402 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Action on data synchronization between two instances with a DR relationship. The value can be: <ul style="list-style-type: none">• pause, indicating that data synchronization is paused between the two instances.• resume, indicating that data synchronization is resumed between the two instances.

Response Parameters

Status code: 202

Table 5-403 Response body parameters

Parameter	Type	Description
job_id	String	ID of the task of pausing or resuming data synchronization between two instances with a DR relationship.

Example Requests

- URI example
POST https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/d58c24da5c2d445f87dc8d697ab3ccb7in12/disaster-recovery/data-synchronization
- Example request body
Pausing data synchronization between two instances with a DR relationship
{"action":"pause"}
Resuming data synchronization between two instances with a DR relationship
{"action":"resume"}

Example Responses

Status code: 202

Accepted

```
{  
    "job_id" : "c010abd0-48cf-4fa8-8cbc-090f093eaa2f"  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.10.9 Obtaining the Status of Data Synchronization Between Two DR Instances

Function

This API is used to obtain the status of data synchronization between two DR instances (primary and standby instances), primary instance ID, data synchronization metrics, and RPO and RTO values in switchover and failover scenarios.

Constraints

This API supports GeminiDB Redis instances.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/instances/{{instance_id}}/disaster-recovery/data-synchronization

Table 5-404 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a user in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	String	Instance ID.

Request Parameters

Table 5-405 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-406 Response body parameters

Parameter	Type	Description
master_instance_id	String	Primary instance ID.
slave_instance_id	String	Standby instance ID.

Parameter	Type	Description
status	String	<p>Status of data synchronization between two DR instances.</p> <p>Value options:</p> <ul style="list-style-type: none">• NA indicates that there is no DR relationships between the two instances.• NEW indicates that data synchronization is not started.• SYNCING indicates that data synchronization is in progress.• SUSPENDING indicates that data synchronization is being paused.• SUSPENDED indicates that data synchronization has been paused.• RECOVERING indicates that data synchronization is being resumed.
data_sync_indicators	object	Data synchronization metric. A value is returned only when the requested instance ID is the primary instance ID. For details, see Table 5-407 .
rto_and_rpo_indicators	Array of objects	RPO and RTO values in failover or switch over scenarios. A value is returned only when the requested instance ID is the primary instance ID. For details, see Table 5-408 .

Table 5-407 NoSQLDrDataSyncIndicators

Parameter	Type	Description
rsync_ops	Long	Rate that rsync transfers data on each node.
rsync_wal_size	Long	Size (in MB) of WAL files to be synchronized on each node.
rsync_push_cost	Long	Average time (in us) required for rsync to push data from the time when a synchronization message is put into the message queue to the time when a response is received.
rsync_send_cost	Long	Average time (in us) required for rsync to send data from the time when a synchronization message is taken out of the message queue to the time when a response is received.
rsync_max_push_cost	Long	Maximum time (in us) required for rsync to push data in a collection period.

Parameter	Type	Description
rsync_max_send_cost	Long	Maximum time (in us) required for rsync to send data in a collection period.
rsync_status	Integer	Synchronization status of rsync. The value 1 indicates that rsync is synchronizing data. The value 0 indicates that rsync is not synchronizing data.

Table 5-408 NoSQLDrRpoAndRto

Parameter	Type	Description
scene	String	Scenario. The value can be FAILOVER or SWITCHOVER . FAILOVER indicates that roles of DR instances are forcibly switched even though data synchronization has not completed. SWITCHOVER indicates that the roles are switched after data synchronization completes. Value options: <ul style="list-style-type: none">• FAILOVER• SWITCHOVER
rpo	Long	Maximum acceptable amount of data loss (measured by time, in seconds) during a switchover or switchover.
rto	Long	Maximum acceptable amount of time (in seconds) for restoring a database and regaining access to it.

Example Requests

- URI example
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/instances/b0965c9010f44ffca9af4ee00746aa8din12/disaster-recovery/data-synchronization
- Example request body
None

Example Responses

Status code: 200

Success

The requested instance ID is the primary instance ID:

```
{  
    "master_instance_id": "b0965c9010f44ffca9af4ee00746aa8din12",  
    "slave_instance_id": "c0965c9010f44ffca9af4ee00746aa8din12",  
}
```

```
"status": "SYNCING",
"data_sync_indicators": {
    "rsync_ops": 100,
    "rsync_wal_size": 30,
    "rsync_push_cost": 30,
    "rsync_send_cost": 20,
    "rsync_max_push_cost": 35,
    "rsync_max_send_cost": 25,
    "rsync_status": 1
},
"rto_and_rpo_indicators": [
    {
        "scene": "SWITCHOVER",
        "rpo": 20,
        "rto": 40
    },
    {
        "scene": "FAILOVER",
        "rpo": 20,
        "rto": 40
    }
]
}
The requested instance ID is the standby instance ID:
{
    "master_instance_id": "c0965c9010f44ffca9af4ee00746aa8din12",
    "slave_instance_id": "b0965c9010f44ffca9af4ee00746aa8din12",
    "status": "SYNCING"
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.11 Task Management

5.11.1 Querying Tasks and Details

Function

This API is used to query tasks (by default) and details.

URI

GET https://{{Endpoint}}/v3/{{project_id}}/jobs

Table 5-409 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Table 5-410 Query parameters

Parameter	Mandatory	Type	Description
id	No	String	Task ID.
start_time	No	String	Query start time in the "yyyy-mm-ddThh:mm:ssZ" format. The default value is 30 days before the current date. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
end_time	No	String	End time (the current time by default) in the "yyyy-mm-ddThh:mm:ssZ" format. It must be later than the start time and the time span cannot exceed 30 days. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
status	No	String	Task status. The value can be: Running , indicating that the task is being executed. Completed , indicating that the task is completed. Failed , indicating that the task fails.

Parameter	Mandatory	Type	Description
name	No	String	<p>Task name.</p> <ul style="list-style-type: none">• CreateInstance: Create an instance.• RestoreNewInstance: Restore data to a new instance.• EnlargeInstance: Add nodes.• ReduceInstance: Delete nodes.• RestartInstance: Restart an instance.• RestartNode: Restart a node.• EnlargeInstanceVolume: Scale up storage space of an instance.• ReduceInstanceVolume: Scale in storage space of an instance.• ResizeInstance: Change the specifications of an instance.• UpgradeDbVersion: Upgrade the engine version.• BindPublicIP: Bind an EIP to an instance.• UnbindPublicIP: Unbind an EIP from an instance.• DeleteInstance: Delete an instance.• EnlargeInstanceColdVolume: Scale up cold storage of an instance.• AddInstanceColdVolume: Enable cold storage for an instance.• ModifySecurityGroup: Modify a security group.• ModifyCcmCert: Modify a CCM certificate.• ModifyPort: Change a port.

Parameter	Mandatory	Type	Description
			<ul style="list-style-type: none">• ConstructDisasterRecovery: Establish a DR relationship.• DeConstructDisasterRecovery: Remove a DR relationship.• SwitchOverDisasterRecovery: Switch a DR relationship.• BuildBiActiveInstance: Create an instance with a dual-active DR relationship.• ReleaseBiActiveInstance: Remove a dual-active relationship from an instance.• BackupInstance: Back up an instance.
offset	No	Integer	<p>Index offset. If offset is set to N, the resource query starts from the N+1 piece of data. The value is 0 by default, indicating that the query starts from the first piece of data. The value cannot be a negative number.</p>
limit	No	Integer	Number of records to be queried. The value can be 10 , 20 , or 50 . The default value is 50 .

Request Parameters

Table 5-411 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token.

Response Parameters

Status code: 200

Table 5-412 Response body parameters

Parameter	Type	Description
jobs	Array of objects (Table 5-413)	Task list.
total_count	Integer	Total number of tasks in the task list.

Table 5-413 JobDetail

Parameter	Type	Description
id	String	Task ID.
name	String	Task name.
status	String	Task execution status. The value can be: Running , indicating that the task is being executed. Completed indicating that the task has been successfully executed. Failed indicating that the task fails to be executed.
start_time	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
end_time	String	End time in the yyyy-mm-ddThh:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
progress	String	Task execution progress. NOTE The execution progress (such as " 60% ", indicating the task execution progress is 60%) is displayed only when the task is being executed. Otherwise, "" is returned.
instance	Objects in Table 5-414	Details of the instance associated with the task.
fail_reason	String	Task failure information.

Table 5-414 JobInstanceState

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.

Example Requests

- URI example
GET `https://[endpoint]/v3/0549b4a43100d4f32f51c01c2fe4acdb/jobs?id=89a0cde6-9c46-4b89-a92c-573e1083ff23`

Example Responses

Status code: 200

Success

```
{  
    "total_count": 1,  
    "jobs": [ {  
        "id": "6f85e061-04dd-42e7-86d6-d3b1e40aac2e",  
        "name": "CreateCassandra",  
        "status": "Running",  
        "start_time": "2023-09-12T06:44:01+0000",  
        "end_time": "2023-09-12T06:44:03+0000",  
        "progress": "14%",  
        "instance": {  
            "id": "27a045b6bf9e46f691f81366d398cb04in06",  
            "name": "nosql-12f5"  
        },  
        "fail_reason": ""  
    } ]  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.12 Enterprise Projects

5.12.1 Querying Enterprise Project Quotas

Function

This API is used to query enterprise project quotas.

URI

GET https://{{Endpoint}}/v3/{project_id}/enterprise-projects/quotas

Table 5-415 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Table 5-416 Query parameters

Parameter	Mandatory	Type	Description
enterprise_project_name	No	String	Enterprise project name. Fuzzy search is supported. If this parameter is not specified, all enterprise project quotas are returned.
offset	No	Integer	<p>Index offset.</p> <ul style="list-style-type: none">The query starts from the next piece of data indexed by this parameter. The value is 0 by default.The value must be a positive integer.
limit	No	Integer	<p>Maximum records to be queried.</p> <ul style="list-style-type: none">The value ranges from 1 to 100.If this parameter is not transferred, the first 100 records are queried by default.

Request Parameters

Table 5-417 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

Response Parameters

Status code: 200

Table 5-418 Response body parameters

Parameter	Type	Description
total_count	Integer	Total number of records
quotas	objects	Enterprise project quotas. For details, see Table 5-419 .

Table 5-419 NoSqlQueryEpsQuotaInfo

Parameter	Type	Description
enterprise_project_id	String	Enterprise project ID
enterprise_project_name	String	Enterprise project name
quota	object	Enterprise project quotas. For details, see Table 5-420 .
used	object	Enterprise project quota used. For details, see Table 5-421 .

Table 5-420 NoSqlEpsQuotaTotal

Parameter	Type	Description
instance	Integer	Instance quota
vcpus	Integer	vCPU quota
ram	Integer	RAM quota

Table 5-421 NoSqlEpsQuotaUsed

Parameter	Type	Description
instance	Integer	Used instance quota
vcpus	Integer	Used vCPU quota
ram	Integer	Used RAM quota

Example Requests

- URI example
GET https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/0549b4a43100d4f32f51c01c2fe4acdb/enterprise-projects/quotas?enterprise_project_name=test&offset=1&limit=10
- Example request body
None

Example Responses

Status code: 200

Success.

```
{  
    "quotas": [ {  
        "enterprise_project_id": "c0348bb1-d09d-4ee2-8edd-53e496fe6b52",  
        "enterprise_project_name": "test1",  
        "quota": {  
            "instance": 500,  
            "vcpus": 1000,  
            "ram": 2000  
        },  
        "used": {  
            "instance": 15,  
            "vcpus": 88,  
            "ram": 256  
        }  
    }, {  
        "enterprise_project_id": "780a6b1f-58b8-4df6-a85e-326d052de704",  
        "enterprise_project_name": "test2",  
        "quota": {  
            "instance": 500,  
            "vcpus": 1000,  
            "ram": 2000  
        },  
        "used": {  
            "instance": 36,  
            "vcpus": 64,  
            "ram": 192  
        }  
    } ],  
    "total_count": 2  
}
```

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

5.12.2 Modifying Enterprise Project Quotas

Function

This API is used to modify enterprise project quotas.

URI

PUT https://{{Endpoint}}/v3/{{project_id}}/enterprise-projects/quotas

Table 5-422 Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

Table 5-423 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token

Table 5-424 Request body parameters

Parameter	Mandatory	Type	Description
quotas	Yes	objects	Enterprise quotas to be modified. For details, see Table 5-425 .

Table 5-425 NoSqlRequestEpsQuota

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Enterprise project ID
quota	Yes	object	Enterprise quotas to be modified. For details, see Table 5-426 . NOTE At least one of parameters instance , vcpus , and ram must be transferred.

Table 5-426 NoSqlEpsQuotaRequestInfo

Parameter	Mandatory	Type	Description
instance	No	Integer	Instance quota
vcpus	No	Integer	vCPU quota
ram	No	Integer	RAM quota

Response Parameters

Status code: 204

No response parameters

Example Requests

- URI example
PUT https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/054e292c9880d4992f02c0196d3ea468/enterprise-projects/quotas
- Modifying quotas of an enterprise project (Set **instance** to **1000**, **vcpus** to **500**, and **ram** to **1024**.)

```
{  
    "quotas" : [ {  
        "enterprise_project_id" : "4d05638e-d4c6-477c-9b51-9620fa257a11",  
        "quota" : {  
            "instance" : 1000,  
            "vcpus" : 500,  
            "ram" : 1024  
        }  
    }, {  
        "enterprise_project_id" : "92450d0e-8c4b-48e1-9909-4d9d2f086ce4",  
        "quota" : {  
            "ram" : 512  
        }  
    } ]  
}
```

Example Responses

None

Status Codes

For details, see [Status Codes](#).

Error Codes

For details, see [Error Codes](#).

6 API v3 (Unavailable Soon)

6.1 Instance Specifications

Function

This API is used to query all instance specifications under a specified condition.

NOTICE

This API will be unavailable on March 7, 2024. You are advised to switch workloads to the new API ([Querying Instance Specifications](#)) before then.

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx
- GeminiDB Redis

URI

- URI format
`GET https://{{Endpoint}}/v3/{{project_id}}/flavors?
region={{region}}&engine_name={{engine_name}}`
- URI example
`https://gaussdb-nosql.ap-
southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/
flavors?region=ap-southeast-1&engine_name=cassandra`
- Required parameters

Table 6-1 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
region	No	Region where the instance is deployed. The value can be: Must be specified. For details, see Regions and Endpoints .
engine_name	No	Database type. The value can be: <ul style="list-style-type: none">• cassandra, indicating that the instances are of the GeminiDB Cassandra type.• mongodb, indicating that the instances are of the GeminiDB Mongo type.• influxdb, indicating that the instances are of the GeminiDB Influx type.• redis, indicating that the instances are of the GeminiDB Redis type.• If this parameter is not transferred, the default value is cassandra.

Request Parameters

None

Response Parameters

- Normal response

Table 6-2 Parameter description

Parameter	Type	Description
total_count	Integer	Total number of records.
flavors	Array of objects	Instance specifications. For more information, see Table 6-3 .

Table 6-3 Data structure description of parameter **flavors**

Parameter	Type	Description
engine_name	String	API name.
engine_version	String	API version.
vcpus	String	Number of vCPUs.
ram	String	Memory size in megabytes (MB).
spec_code	String	Resource specification code. Example: geminidb.cassandra.8xlarge.4 NOTE <ul style="list-style-type: none">• geminidb.cassandra indicates that the instance of the GeminiDB Cassandra type.• 8xlarge.4 indicates node specifications.
availability_zone	Array of strings	ID of the AZ that supports the specifications. NOTE <ul style="list-style-type: none">• This parameter has been discarded. Do not use it.
az_status	Object	Status of specifications in an AZ. The value can be: <ul style="list-style-type: none">• normal, indicating that the specifications are on sale.• unsupported, indicating that the specifications are not supported.• sellout, indicating that the specifications are sold out.

 **NOTE**

The parameter values under **az_status** are example values and only for reference.

- Example normal response

```
{  
    "total_count": 4,  
    "flavors": [  
        {  
            "engine_name": "cassandra",  
            "engine_version": "3.11",  
            "vcpus": "4",  
            "ram": "16",  
            "spec_code": "geminidb.cassandra.xlarge.4",  
            "availability_zone": [  
                "az1",  
                "az2"  
            ],  
        },  
        {  
            "engine_name": "redis",  
            "engine_version": "3.2",  
            "vcpus": "2",  
            "ram": "8",  
            "spec_code": "geminidb.redis.small.2",  
            "availability_zone": [  
                "az1",  
                "az2"  
            ],  
        },  
        {  
            "engine_name": "memcached",  
            "engine_version": "1.5",  
            "vcpus": "1",  
            "ram": "4",  
            "spec_code": "geminidb.memcached.small.1",  
            "availability_zone": [  
                "az1",  
                "az2"  
            ],  
        },  
        {  
            "engine_name": "mongodb",  
            "engine_version": "4.4",  
            "vcpus": "2",  
            "ram": "8",  
            "spec_code": "geminidb.mongodb.small.2",  
            "availability_zone": [  
                "az1",  
                "az2"  
            ],  
        }  
    ]  
}
```

```
"az_status": {  
    "az1":"normal",  
    "az2":"unsupported"  
}  
},  
{  
    "engine_name": "cassandra",  
    "engine_version": "3.11",  
    "vcpus": "8",  
    "ram": "32",  
    "spec_code": "geminidb.cassandra.2xlarge.4",  
    "availability_zone": [  
        "az1",  
        "az2"  
    ],  
    "az_status": {  
        "az1":"unsupported",  
        "az2":"normal"  
    }  
},  
{  
    "engine_name": "cassandra",  
    "engine_version": "3.11",  
    "vcpus": "16",  
    "ram": "64",  
    "spec_code": "geminidb.cassandra.4xlarge.4",  
    "availability_zone": [  
        "az1",  
        "az2"  
    ],  
    "az_status": {  
        "az1":"normal",  
        "az2":"sellout"  
    }  
},  
{  
    "engine_name": "cassandra",  
    "engine_version": "3.11",  
    "vcpus": "32",  
    "ram": "128",  
    "spec_code": "geminidb.cassandra.8xlarge.4",  
    "availability_zone": [  
        "az1",  
        "az2"  
    ],  
    "az_status": {  
        "az1":"normal",  
        "az2":"normal"  
    }  
},  
]  
}
```

- Abnormal response
For details, see [Abnormal Request Results](#).

Status Codes

For more information, see [Status Codes](#).

Error Codes

For more information, see [Error Codes](#).

6.2 Parameter Templates

6.2.1 Obtaining Parameter Templates

Function

This API is used to obtain parameter templates, including default and custom parameter templates of all instances.

NOTICE

This API will be unavailable on March 7, 2024. You are advised to switch workloads to the new API ([Obtaining Parameter Templates](#)) before then.

Constraints

This API supports the following types of instances:

- GeminiDB Cassandra
- GeminiDB Mongo
- GeminiDB Influx

URI

- URI format
GET `https://{Endpoint}/v3/{project_id}/configurations`
- URI example
`https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/configurations`
- Required parameters

Table 6-4 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

None

Response Parameters

- Normal response

Table 6-5 Parameter description

Parameter	Type	Description
count	Integer	Total number of records.
configurations	Array of objects	Parameter templates For details, see Table 6-6 .

Table 6-6 Data structure description of parameter **configurations**

Parameter	Type	Description
id	String	Parameter template ID.
name	String	Parameter template name.
description	String	Parameter template description.
datastore_version_name	String	Database version name.
datastore_name	String	Database name
created	String	Creation time in the yyyy-MM-ddTHH:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
updated	String	Update time in the yyyy-MM-ddTHH:mm:ssZ format. T is the separator between calendar and hourly notation of time. Z indicates the time zone offset.
user_defined	Boolean	Whether the parameter template is a custom template. The value can be: <ul style="list-style-type: none">false: indicates that the parameter template is a default parameter template.true: indicates that the parameter template is a custom template.

- Example normal response

```
{  
    "count": 2,  
    "configurations": [  
        {  
            "id": "887ea0d1bb0843c49e8d8e5a09a95652pr06",  
            "name": "configuration_test",  
            "description": "configuration_test",  
            "datastore_version_name": "3.11",  
            "datastore_name": "cassandra",  
            "created": "2019-05-15T11:53:34+0000",  
            "updated": "2019-05-15T11:53:34+0000",  
            "user_defined": true  
        },  
        {  
            "id": "3bc1e9cc0d34404b9225ed7a58fb284epr06",  
            "name": "Default-Cassandra-3.11",  
            "description": "Default parameter group for cassandra 3.11",  
            "datastore_version_name": "3.11",  
            "datastore_name": "cassandra",  
            "created": "2020-03-21T03:38:51+0000",  
            "updated": "2019-03-21T03:38:51+0000",  
            "user_defined": false  
        }  
    ]  
}
```

- Abnormal response

For details, see [Abnormal Request Results](#).

Status Codes

For more information, see [Status Codes](#).

Error Codes

For more information, see [Error Codes](#).

6.3 Tags

6.3.1 Querying an Instance by Tag

Function

This API is used to query a specified instance by tag.

NOTICE

This API will be unavailable on March 7, 2024. You are advised to switch workloads to the new API ([Querying an Instance by Tag](#)) before then.

Constraints

- This API supports the following types of instances:

- GeminiDB Cassandra
 - GeminiDB Mongo
 - GeminiDB Influx
 - GeminiDB Redis
- A maximum of 20 tags can be added to a DB instance. The tag key must be unique.

URI

- URI format
POST https://[Endpoint]/v3/{project_id}/instances/resource_instances/action
- URI example
https://gaussdb-nosql.ap-southeast-1.myhuaweicloud.com/v3/375d8d8fad1f43039e23d3b6c0f60a19/instances/resource_instances/action
- Required parameters

Table 6-7 Parameter description

Parameter	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request Parameters

- Required parameters

Table 6-8 Parameter description

Parameter	Mandatory	Type	Description
offset	No	String	<p>Index position. The query starts from the next piece of data indexed by this parameter.</p> <ul style="list-style-type: none">● If action is set to count, this parameter does not need to be transferred.● If action is set to filter, this parameter must be a number but cannot be a positive number. The default value is 0, indicating that the query starts from the first piece of data.

Parameter	Mandatory	Type	Description
limit	No	String	<p>Number of records to be queried.</p> <ul style="list-style-type: none">• If action is set to count, this parameter does not need to be transferred.• If action is set to filter, the value ranges from 1 to 100. If this parameter is not transferred, the first 100 instances are queried by default.
action	Yes	String	<p>Operation identifier.</p> <ul style="list-style-type: none">• If action is set to filter, instances are queried based on tag filters.• If action is set to count, only the total number of records is returned.
matches	No	Array of objects	<p>Search parameter.</p> <ul style="list-style-type: none">• If this parameter is not specified, the query is not based on the instance name or ID.• If the parameter is specified, see parameter values in Table 6-10.
tags	No	Array of objects	<p>Included tags. Each tag contains up to 20 keys. For more information, see Table 6-9.</p>

Table 6-9 Data structure description of parameter **tags**

Parameter	Mandatory	Type	Description
key	Yes	String	Tag key. It can contain a maximum of 36 Unicode characters. The key value cannot be null, an empty string, or spaces. Before using key , delete spaces before and after the value. NOTE The character set of this parameter is not verified during search.
values	Yes	Array of strings	Tag values. Each tag value can contain a maximum of 43 Unicode characters and cannot contain spaces. Before using values , delete spaces before and after the value. If the values is not specified, any parameter value can be queried. All values are in the OR relationship.

Table 6-10 Data structure description of parameter **matches**

Parameter	Mandatory	Type	Description
key	Yes	String	Query criteria. The value can be instance_name or instance_id , indicating that the query is based on the instance name or instance ID.
value	Yes	String	Name or ID of the instance to be queried

- Example request body

Querying an instance by tag:

```
{  
  "offset": "100",  
  "limit": "100",  
  "action": "filter",  
  "matches": [  
    {  
      "key": "instance_name",  
      "value": "test-af07"  
    }  
  ],
```

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

Querying the total number of records:

```
{
  "action": "count",
  "tags": [
    {
      "key": "key1",
      "values": [
        "value1",
        "value2"
      ]
    },
    {
      "key": "key2",
      "values": [
        "value1",
        "value2"
      ]
    }
  ],
  "matches": [
    {
      "key": "instance_name",
      "value": "test-af07"
    },
    {
      "key": "instance_id",
      "value": "958693039f284d6ebfb177375711072ein06"
    }
  ]
}
```

Response Parameters

- Normal response

Table 6-11 Parameter description

Parameter	Type	Description
instances	Array of objects	All instances
total_count	Integer	Total number of records

Table 6-12 Data structure description of parameter **instance**

Parameter	Type	Description
instance_id	String	Instance ID
instance_name	String	Instance name
tags	Array of objects	All tags. If there are no tags, tags is taken as an empty array by default. For more information, see Table 6-13 .

Table 6-13 Data structure description of parameter **tags**

Parameter	Type	Description
key	String	Tag key. The tag key can contain a maximum of 36 Unicode characters and must be specified. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-).
value	String	Tag value. The tag value can contain a maximum of 43 Unicode characters and can be an empty string. It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-).

- Example normal response

Returning a specified instance by tag:

```
{  
  "instances": [  
    {  
      "instance_id": "2acbf2223caf3bac3c33c6153423c3ccin06",  
      "instance_name": "test-single",  
      "tags": [  
        {  
          "key": "key1",  
          "value": "value1"  
        },  
        {  
          "key": "key2",  
          "value": "value1"  
        }  
      ]  
    }  
  ]  
}
```

Returning total records:

```
{  
    "total_count": 4  
}
```

- Abnormal response
For details, see [Abnormal Request Results](#).

Status Codes

For more information, see [Status Codes](#).

Error Codes

For more information, see [Error Codes](#).

7

Permission Policies and Supported Actions

7.1 Introduction

You can use Identity and Access Management (IAM) for fine-grained management of the permissions for your GeminiDB databases. If your account does not need individual IAM users, then you may skip over this section.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permission policies or roles to these groups. Users inherit permissions from the groups that they are added to and can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using **roles** and **policies**. Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

Policy-based authorization is useful if you want to allow or deny the access to an API.

An account has all the permissions required to call all APIs, but IAM users must be assigned the required permissions. The permissions required for calling an API are determined by the actions supported by the API. Only users who have been granted permissions allowing the actions can call the API successfully. For example, if an IAM user queries GeminiDB Cassandra instances using an API, the user must have been granted the permissions that allow the **nosql:instance:list** action.

Supported Actions

GeminiDB provides system-defined policies that can be directly used in IAM. You can also create custom policies and use them to supplement system-defined policies, implementing more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- Permissions: Statements in a policy that allow or deny certain operations.
- APIs: REST APIs that can be called in a custom policy
- Actions: Added to a custom policy to control permissions for specific operations.
- IAM or enterprise projects: Type of projects for which an action will take effect. Policies that contain actions for both IAM and enterprise projects can be used and take effect for both IAM and Enterprise Management. Policies that only contain actions for IAM projects can be used and only take effect for IAM. For the differences between IAM and enterprise projects, see [Differences Between IAM and Enterprise Management](#).

For details about the custom actions supported by GeminiDB, see [GeminiDB Actions](#).

7.2 GeminiDB Actions

Table 7-1 Instance management actions

Permission	API	Action	IAM Project	Enterprise Project
Creating an Instance	POST /v3/{project_id}/instances	nosql:instance:create	✓	✓
Deleting an instance	DELETE /v3/{project_id}/instances/{instance_id}	nosql:instance:delete	✓	✓
Querying instances	GET /v3/{project_id}/instances? id={id}&name ={name}&mode={mode}&datastore_type ={datastore_type}&vpc_id={vpc_id}&subnet_id={subnet_id}&offset={offset}&limit ={limit}	nosql:instance:list	✓	✓
Scaling up storage space of an instance	POST /v3/{project_id}/instances/{instance_id}/extend-volume	nosql:instance:modifyStorageSize	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Adding nodes for a cluster instance	POST /v3/{project_id}/instances/{instance_id}/enlarge-node	nosql:instance:extendNode	✓	✓
Deleting nodes from a cluster instance	POST /v3/{project_id}/instances/{instance_id}/reduce-node	nosql:instance:reduceNode	✓	✓
Changing specifications of an instance	PUT /v3/{project_id}/instances/{instance_id}/resize	nosql:instance:modifySpecification	✓	✓
Changing the administrator password	PUT /v3/{project_id}/instances/{instance_id}/password	nosql:instance:modifyPasswd	✓	✓
Editing the name of an instance	PUT /v3/{project_id}/instances/{instance_id}/name	nosql:instance:rename	✓	✓
Changing the security group of an instance	PUT /v3/{project_id}/instances/{instance_id}/security-group	nosql:instance:modifySecurityGroup	✓	✓
Upgrading minor version	POST /v3/{project_id}/instances/{instance_id}/db-upgrade	nosql:instance:upgradeDatabaseVersion	✓	✓
Creating cold storage	POST /v3/{project_id}/instances/{instance_id}/cold-volume	nosql:instance:modifyStorageSize	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Scaling up cold storage	PUT /v3/{project_id}/instances/{instance_id}/cold-volume	nosql:instance:modifyStorageSize	✓	✓
Binding or unbinding an EIP	POST /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/public-ip	nosql:instance:bindPublicIp	✓	✓
Enabling or disabling SSL	POST /v3/{project_id}/instances/{instance_id}/ssl-option	nosql:instance:switchSSL	✓	✓
Restarting an instance	POST /v3/{project_id}/instances/{instance_id}/restart	nosql:instance:restart	✓	✓
Configuring autoscaling policies for storage space	PUT /v3/{project_id}/instances/disk-auto-expansion	nosql:instance:modifyStorageSize	✓	✓

Table 7-2 Actions for backups and restorations

Permission	API	Action	IAM Project	Enterprise Project
Querying an automated backup policy	GET /v3/{project_id}/instances/{instance_id}/backups/policy	nosql:backup:list	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Configuring an automated backup policy	PUT /v3/{project_id}/instances/{instance_id}/backups/policy	nosql:instance:modifyBackupPolicy	✓	✓
Querying instances that can be restored	GET /v3/{project_id}/backups/{backup_id}/restorable-instances	nosql:instance:list	✓	✓
Querying the time window when a backup can be restored	GET /v3/{project_id}/instances/{instance_id}/backups/restorable-time-periods	nosql:backup:list	✓	✓
Creating a manual backup	POST /v3/{project_id}/instances/{instance_id}/backups	nosql:backup:create	✓	✓
Deleting a manual backup	DELETE /v3/{project_id}/backups/{backup_id}	nosql:backup:delete	✓	✓
Restoring data to an existing instance	POST /v3/{project_id}/instances/{instance_id}/recovery	nosql:backup:refreshInstanceFromBackup	✓	✓

Table 7-3 Parameter template management actions

Permission	API	Action	IAM Project	Enterprise Project
Obtaining parameter templates	GET /v3/{project_id}/configurations	nosql:param:list	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Creating a parameter template	POST /v3/{project_id}/configurations	nosql:param:create	✓	✓
Modifying parameters in a parameter template	PUT /v3/{project_id}/configurations/{config_id}	nosql:param:modify	✓	✓
Applying a parameter template	PUT /v3/{project_id}/configurations/{config_id}/apply	nosql:instance:modifyParameter	✓	✓
Modifying parameters of a specified instance	PUT /v3/{project_id}/instances/{instance_id}/configurations	nosql:instance:modifyParameter	✓	✓
Obtaining parameters of a specified instance	GET /v3/{project_id}/instances/{instance_id}/configurations	nosql:param:list	✓	✓
Obtaining parameters of a specified parameter template	GET /v3/{project_id}/configurations/{config_id}	nosql:param:list	✓	✓
Deleting a parameter template	DELETE /v3/{project_id}/configurations/{config_id}	nosql:param:delete	✓	✓
Querying instances that a parameter template can be applied to	GET /v3/{project_id}/configurations/{config_id}/applicable-instances	nosql:instance:list	✓	✓
Viewing parameter change history of an instance	GET /v3/{project_id}/instances/{instance_id}/configuration-histories	nosql:param:list	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Viewing application records of a parameter template	GET /v3/{project_id}/configurations/{config_id}/applied-histories	nosql:param:list	✓	✓

Table 7-4 Tag management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying an instance by tag	POST /v3/{project_id}/instances/resource_instances/action	<ul style="list-style-type: none">nosql:instance:listnosql:tag:list	✓	✓
Adding or deleting resource tags in batches	POST /v3/{project_id}/instances/{instance_id}/tags/action	nosql:instance:tag	✓	✓
Querying tags of an instance	GET /v3/{project_id}/instances/{instance_id}/tags	<ul style="list-style-type: none">nosql:instance:listnosql:tag:list	✓	✓

Table 7-5 Log management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying slow query logs of an instance	GET /v3/{project_id}/instances/{instance_id}/slowlog?start_date={start_date}&end_date={end_date}	nosql:instance:list	✓	✓

Table 7-6 Quota management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying resource quotas	GET /v3/{project_id}/quotas	nosql:instance:list	✓	✓

Table 7-7 Actions for disaster recovery management

Permission	API	Action	IAM Project	Enterprise Project
Performing a pre-check for DR	POST /v3/{projectId}/instance/{instanceId}/disaster-recovery/precheck	nosql:dr:precheck	✓	✓
Creating a DR relationship	POST /v3/{projectId}/instance/{instanceId}/disaster-recovery/construction	nosql:dr:construct	✓	✓
Deleting a DR relationship	POST /v3/{projectId}/instance/{instanceId}/disaster-recovery/deconstruction	nosql:dr:deconstruct	✓	✓
Obtaining role information of a DR instance	POST /v3/{project_id}/instances/{instance_id}/instance-role	nosql:instance:switchoverDaterRecovery	✓	✓

Permission	API	Action	IAM Project	Enterprise Project
Promoting a DR instance from standby to primary	POST /v3/{project_id}/instances/{instance_id}/switchover-master	nosql:instance:switchoverFromDisasterToMaster	✓	✓
Demoting a DR instance from primary to standby	POST /v3/{project_id}/instances/{instance_id}/switchover-slave	nosql:instance:switchoverFromMasterToDisaster	✓	✓
Pausing/Resuming data synchronization between two instances with a DR relationship	POST /v3/{project_id}/instances/{instance_id}/disaster-recovery/data-synchronization	nosql:dr:operateDataSync	✓	✓

 NOTE

The check mark (✓) indicates that the action takes effect. The cross mark (✗) indicates that the action does not take effect.

8 Appendixes

8.1 Abnormal Request Results

- Abnormal Response

Table 8-1 Parameter description

Parameter	Mandatory	Type	Description
error_code	Yes	String	Error code returned when a task submission exception occurs.
error_msg	Yes	String	Error description returned when a task submission exception occurs.

- Example abnormal response

```
{  
    "error_code": "DBS.200001",  
    "error_msg": "Parameter error"  
}
```

8.2 Status Codes

- Normal

Status Code	Encoding	State Description
200	OK	Request succeeded.
204	No Content	Request succeeded, but no response is returned.
202	Accepted	Asynchronous request submitted successfully.

- Abnormal

Status Code	Encoding	State Description
400	Bad Request	Invalid request. Do not retry the request before modification.
401	Unauthorized	The authorization information provided by the client is incorrect or invalid. Check the username and password.
403	Forbidden	The request is rejected. The server understood the request, but is refusing to fulfill it. The client should not repeat the request without modifications.
404	Not Found	The requested resource could not be found. Do not retry the request before modification.
405	Method Not Allowed	The method specified in the request is not supported for the requested resource. Do not retry the request before modification.
409	Conflict	The request could not be processed due to a conflict. The resource that the client attempts to create already exists, or the update request fails to be processed because of a conflict.
413	Request Entity Too Large	The request is larger than that a server is 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.
415	Unsupported Media Type	The server is unable to process the media format in the request.
422	Unprocessable Entity	The request is well-formed but is unable to be processed due to semantic errors.

Status Code	Encoding	State Description
500	Internal Server Error	The server is able to receive the request but unable to understand the request.
501	Not Implemented	The server does not support the requested function.
503	Service Unavailable	The requested service is unavailable. Do not retry the request before modification.

8.3 Error Codes

If an error occurs during API calling, no results will be returned. You can locate the error cause based on error codes of each API. If an error occurs, an HTTP status code is returned. The returned message body contains a specific error code and error message.

Error Code Description

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [Error Codes](#).

Table 8-2 Error code description

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200001	Parameter error.	Parameter error.	Check whether transferred parameters or URLs are correct.
404	DBS.200002	The DB instance does not exist.	Instance not found.	Check whether the instance and its ID are correct and whether the instance exists.
400	DBS.200010	Authentication failed.	Authentication failed.	Check whether the tenant and instance match.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
403	DBS.200011	This instance {0} status makes it not be allowed to do this {1} operation now.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
404	DBS.200013	This node does not exist.	Node not found.	Check whether the node ID or group ID is correct.
403	DBS.200018	This instance's status or its node's status makes it not be allowed to do this operation now.	Unavailable instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
403	DBS.200019	Another operation is being performed on the DB instance or the DB instance is faulty.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.200022	The DB instance name {0} already exists.	Instance name already exists.	Check whether the instance name exists.
400	DBS.200024	The region is unavailable.	Unavailable region.	Check whether the region name is correct and whether the region is available.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200025	Invalid AZ.	Invalid AZ.	Check whether the AZ name is correct and whether the AZ is available.
403	DBS.200028	Volume size reach limit.	Maximum storage space has been reached.	Check whether the storage space exceeds the upper limit.
400	DBS.200029	Invalid username and password.	Invalid username and password.	Check whether the username and password match and whether the password meets password strength requirements.
400	DBS.200041	Invalid datastore version.	Invalid database version.	Check whether the database version is supported.
404	DBS.200042	Invalid database engine.	Invalid DB API.	Check whether the DB version is supported.
400	DBS.200047	Operation cannot be executed in current state of the DB instance or node.	Operation cannot be executed in current state of the instance or node.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200048	Invalid VPC.	Invalid VPC.	Check whether the VPC ID and name are correct and meet the requirements.
400	DBS.200049	Invalid subnet.	Invalid subnet.	Check whether the subnet ID and name are correct and meet the requirements.
400	DBS.200050	Invalid security group.	Invalid security group.	Check whether the security group ID and name are correct and meet the requirements.
400	DBS.200052	Invalid password.	Invalid password.	Check whether the username and password match and whether the password meets password strength requirements.
400	DBS.200053	The DB instance specifications do not exist.	Instance specifications not found.	Check whether the specifications are correct and supported in the current AZ.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200054	Invalid DB instance specifications.	Invalid instance specifications.	Check whether the specifications are correct and supported in the current AZ.
400	DBS.200057	Invalid parameter group ID.	Invalid parameter template.	Check whether the parameter template is supported.
404	DBS.200058	Parameter template does not exist.	Parameter template not found.	Check whether the parameter template exists.
400	DBS.200059	Invalid database port.	Invalid database port.	Check whether the database port is missing or valid.
400	DBS.200060	The database port number is out of the specified range.	Database port is not in the specified range.	Check whether the database port is valid.
400	DBS.200063	Invalid DB instance type.	Invalid instance type.	Check whether the instance type is valid.
400	DBS.200068	Weak password.	Weak password.	Password is too easy to guess. Change it to a strong password.
400	DBS.200072	Invalid storage space.	Invalid storage space.	Check whether the storage space exceeds the upper limit.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200075	Invalid node role.	Invalid node role.	Check whether the role of the node meets the requirements and whether the instance is normal.
403	DBS.200076	Operation cannot be executed in current state of the DB instance.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.200077	Failed to change the password.	Updating password failed.	Check whether the username is correct.
400	DBS.200091	Invalid IP address.	Invalid IP address.	Check whether the required IP address is missing or whether the input IP address is valid.
400	DBS.200092	The IP address already exists.	IP address already exists.	Check whether the IP address exists.
400	DBS.200095	Invalid parameter.	Parameter error.	Check whether parameters in the request and URLs are correct.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
500	DBS.200165	Insufficient enterprise project instance quota range.	Enterprise project quota of the instance is insufficient.	Increase the enterprise project quota on the GeminiDB console.
500	DBS.200166	Insufficient enterprise project cpu quota range.	CPU quota of the enterprise project is insufficient.	Increase the CPU quota on the GeminiDB console.
500	DBS.200167	Insufficient enterprise project mem quota range.	Memory quota of the enterprise project is insufficient.	Increase the memory quota on the GeminiDB console.
400	DBS.200302	The storage space increase must be a positive integer.	Storage space increase is not a positive integer.	Check whether the storage space increase is a positive integer.
400	DBS.200303	The maximum number of times that the storage space can be scaled up has been reached.	Storage space has reached its upper limit and cannot be scaled up anymore.	Contact technical support to scale up the storage space.
400	DBS.200304	The storage space can be scaled up for a maximum of four times.	Storage space can be scaled up at most four times.	Check how many times the instance has been scaled up.
400	DBS.200306	Invalid storage space.	Invalid storage space.	Check whether the storage space is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200311	Scaling up storage space is not allowed in current state of the node.	Scaling up storage space not allowed on the current node.	Check whether the node type, instance type, and node ID are correct.
400	DBS.200434	Failed to restart the DB instance.	Restarting instance failed.	Check whether the instance is available or ongoing other operations.
400	DBS.200451	The node does not exist.	Node not found.	Check whether the node ID is correct.
400	DBS.200462	The database port is the same as the current port.	Database port is the same as current port.	Check whether the new port number is the same as the original port number.
400	DBS.200470	Invalid AZ.	Invalid AZ.	Check whether the AZ is correct.
400	DBS.200501	The subnet does not exist.	Subnet deleted.	Check whether the subnet ID and name exist and whether the subnet matches the VPC.
400	DBS.200502	The security group does not exist.	Security group is not found or does not belong to the VPC.	Check whether the security group ID and name exist and whether the security group matches the VPC.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200503	The VPC does not exist.	VPC deleted.	Check whether the VPC is available to the tenant.
400	DBS.200506	The encryption key does not exist.	Storage encryption key ID not found.	Check whether the disk encryption key ID exists.
400	DBS.200507	The encryption key is not available.	Storage encryption key unavailable.	Check whether the disk encryption key is available.
400	DBS.200604	The instance is not owned by the current user.	Instance does not belong to the current user.	Check whether the project ID is subordinate to the instance ID.
400	DBS.200700	The EIP status does not allow EIP binding.	EIP is being bound and cannot be bound again.	Check whether there is an EIP being bound to the instance.
400	DBS.200701	The EIP status does not allow EIP unbinding.	EIP cannot be unbound.	Check whether the EIP status allows an unbinding operation.
400	DBS.200702	The node has been bound to a public IP address and cannot be bound again.	Node has already an EIP bound and cannot be bound with another EIP.	Check whether an EIP has been bound to the node.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200705	The PublicIP does not exist.	Target EIP not found.	Check whether the EIP exists and whether the EIP and its ID match.
400	DBS.200816	Failed to create the database user.	Creating database user failed.	Check whether the database user name is valid and check the database status and instance status.
400	DBS.200817	Failed to obtain the database user list.	Obtaining database users failed.	Check the database status and instance status.
400	DBS.200818	Failed to delete the database user.	Deleting database user failed.	Check the database status and instance status.
400	DBS.200823	The database does not exist.	Database not found.	Check whether the database name is valid.
400	DBS.200824	The database account does not exist.	Database account not found.	Check whether the database user name is valid.
400	DBS.200826	The database name already exists.	Database name already exists.	Check whether the database name is valid.
400	DBS.200827	The database user already exists.	Database account name already exists.	Check whether the database user is valid.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.200828	Built-in database accounts cannot be edited.	This is an internal database account and cannot be operated by users.	Check whether the database user is valid.
500	DBS.200998	The system is busy. Try again later.	The system is busy. Try again later.	The system is busy. Try again later.
403	DBS.201000	The status of DB instance {0} does not allow the {1} operation.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.201006	Parameter error.	Parameter error.	Check whether transferred parameters or URLs are correct.
403	DBS.201014	Operation cannot be executed in current state of the DB instance.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
403	DBS.201015	This operation cannot be performed because another operation is being performed on the DB instance or the DB instance is faulty. Try again later.	Operation cannot be performed because another operation is being performed.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.201020	Invalid DB engine.	Invalid DB API.	Check whether the DB engine is supported.
403	DBS.201028	The DB instance does not exist.	Instance not found.	Check whether the instance belongs to the tenant and whether the instance exists.
400	DBS.201035	The database name must be different.	Database name already exists.	Check whether the same database name exists.
400	DBS.201038	The collection name must be different.	Collection name already exists.	Check whether the same collection name exists.
400	DBS.201101	Invalid backup period.	Invalid backup cycle.	Check whether the backup cycle meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.201106	Invalid retention period.	Invalid retention period.	Check whether the backup retention period is correct.
400	DBS.201201	The backup already exists.	Backup file already exists.	Check whether the backup name or ID already exists.
400	DBS.201202	Operation cannot be executed in current state of the DB instance.	Operation cannot be performed in current state of the instance.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.201204	Operation cannot be executed in current state of the DB instance.	Backup file not found.	Check whether the backup file exists and matches the instance.
400	DBS.201212	Backup ID is illegal.	Invalid backup ID.	Check whether the backup ID exists.
400	DBS.201214	The backup file does not exist.	Backup file not found.	Check whether the backup file exists and matches the instance.
400	DBS.201215	Time is illegal.	Invalid time.	Check whether the time meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.201319	Deleting backup file is not allowed because a restoration task is currently in progress. Please wait.	Original backup file cannot be deleted during restoration.	Check whether the backup is being used to restore instances.
400	DBS.201501	The DB instance does not exist.	Instance not found.	Check whether the instance belongs to the tenant, whether the instance name or ID is correct, and whether the instance exists.
400	DBS.201502	The DB instance does not exist.	Instance not found.	Check whether the instance belongs to the tenant, whether the instance name or ID is correct, and whether the instance exists.
400	DBS.280308	The AZ is inconsistent.	Inconsistent AZs.	Check whether the instance is in the same AZ as dedicated resources.
400	DBS.212001	The parameter group {0} does not exist.	Parameter template not found.	Check whether the parameter template exists.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.212003	This operation is not permitted.	Operation not allowed.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.212006	The node associated with this parameter group is not available.	Node associated with the parameter template is abnormal.	Check whether the node associated with the parameter template is normal.
400	DBS.212008	The database type does not exist.	Unsupported database version.	Check whether the database version supports this operation.
400	DBS.212013	The parameter group does not exist.	Parameter template not found.	Check whether the parameter template exists or belongs to the current tenant.
400	DBS.212017	The parameter is invalid.	Invalid parameter.	Check whether transferred parameters or URLs are correct and meet the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.212019	Invalid parameter.	Invalid parameter.	Check whether transferred parameters or URLs are correct and meet the requirements.
400	DBS.212028	Invalid description.	Invalid parameter template description.	Check whether the parameter template description is valid.
400	DBS.212030	The parameter group name already exists.	Parameter template name already exists.	Check whether the parameter template name exists.
400	DBS.212031	Invalid parameter group name.	Invalid parameter template name.	Check whether the parameter template name is valid.
400	DBS.212032	The operation cannot be performed because this parameter group is being applied to one or more DB instance nodes.	Operation is not allowed because the parameter template is applied to one or more instance nodes.	Check whether the parameter template has been applied to the instance.
400	DBS.212035	Failed to associate this parameter group with the DB instance because the DB instance is currently being operated.	Operation cannot be performed in current state of the instance.	Check whether the instance is ongoing other operations.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.212037	Parameters are incorrectly set.	Parameter error.	Check whether the parameter value is valid or within the valid range.
400	DBS.216016	DB instance does not exist.	Instance not found.	Check whether the instance exists.
400	DBS.216029	This operation is not allowed.	Operation not allowed.	Check whether the operation is valid or whether the current engine supports the operation.
400	DBS.216030	The queried node does not belong to the current instance.	Queried node does not belong to the current instance.	Check whether the input node belongs to the current instance.
400	DBS.216044	Invalid vpc cidr.	Invalid VPC CIDR block.	Check whether the format of the input VPC CIDR block is valid. Check whether the DR instance has overlapping VPC CIDR blocks in DR scenarios.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.216045	Invalid db engine version.	Invalid DB API version.	Check whether the DB engine version is available or whether the version supports the current operation.
400	DBS.216046	Invalid subnet cidr.	Invalid subnet CIDR block.	Check whether the format of the input VPC CIDR block is valid.
400	DBS.238007	This operation cannot be performed in the current IP address status.	Operation cannot be performed in the current IP address state.	Check whether the delivered IP address is in use.
400	DBS.239010	Reduce num or target invalid.	Invalid quantity of nodes to be deleted or invalid nodes.	Check whether the input node belongs to the current instance.
400	DBS.239011	Reduce num invalid.	Invalid number of nodes to be deleted.	Check whether the number of input nodes is valid.
400	DBS.239012	Reduce target invalid.	Invalid node to be deleted.	Check whether the input node belongs to the current instance.
400	DBS.239013	resize flavor invalid.	Inappropriate specifications.	Check whether the input specifications are valid.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.239014	Current disk capacity does not support scaling in the number of nodes.	Current storage space does not allow deleting nodes.	Check the storage space of the instance.
400	DBS.240001	node num inconsistent.	Inconsistent nodes.	Check whether the number of nodes is consistent.
400	DBS.240002	node num incorrect.	Invalid quantity of nodes.	Check whether the number of nodes is valid.
400	DBS.240003	Invalid billing mode.	Invalid billing mode.	Check whether the billing mode is valid.
400	DBS.240004	Invalid subscription type.	Invalid subscription type.	Check whether the subscription type is valid.
400	DBS.240005	Invalid validity period.	Invalid required duration.	Check whether the required duration is valid.
400	DBS.240006	Invalid renewal mode.	Invalid renewal mode.	Check whether the renewal mode is valid.
400	DBS.240007	Invalid payment mode.	Invalid payment mode.	Check whether the payment mode is valid.
400	DBS.240008	Submit order failed.	Order submission failed.	Contact customer service.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.240009	Deleting nodes cannot be executed in current state of the DB instance.	Deleting nodes is not allowed in current state of the instance.	Check whether the current instance has nodes that can be deleted.
400	DBS.240010	The selected nodes do not support shrinkage.	Selected nodes cannot be deleted.	Check whether the selected nodes can be deleted.
400	DBS.240011	{0}	Order submission failed.	Check whether an error message is returned.
400	DBS.240012	The maximum number of resources that can be changed has been reached.	The maximum number of resources that can be changed has been reached.	Check whether the number of nodes in the current instance exceeds the upper limit.
400	DBS.240013	The current disk capacity cannot be changed to the target flavor.	Specifications cannot be changed because the storage space is too small.	Check whether the storage space of the current instance exceeds the upper limit defined by the target instance specifications.
400	DBS.280001	Parameter error.	Parameter error.	Check whether transferred parameters or URLs are correct and meet the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
500	DBS.280005	Server error. Try again later.	Server error. Try again later.	Contact technical support.
400	DBS.280015	Permission denied.	Insufficient permissions.	Check whether the token expires and whether the instance matches the tenant.
400	DBS.280016	Resource not found.	Resource not found.	Check whether transferred parameters are correct and whether the instance exists.
403	DBS.280019	Account suspended.	Account in arrears.	Check the account balance.
403	DBS.280032	You do not have permission to perform this operation. Contact the administrator to obtain permission.	Permission denied.	Check whether the user group to which the current user belongs has the corresponding operation permission.
400	DBS.280042	Invalid request.	Invalid request.	Check whether the current instance status and the ongoing operation allow this operation or whether the request is valid.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280040	Parameter is null.	Parameter missed.	Check whether there are parameters not input.
404	DBS.280045	This parameter group does not exist.	Parameter template not found.	Check whether the parameter template exists in the request.
403	DBS.280056	Token invalid.	Invalid token.	Check whether the instance belongs to the tenant and whether the token has been obtained again.
400	DBS.280063	You do not have following permission to perform this operation: {0}. Contact the administrator to obtain permission.	Current user does not have the permission to perform xxx operation. Contact the account administrator.	Check whether the user group to which the current user belongs has the corresponding operation permission.
500	DBS.280064	Check PDP permissions failed.	Fine-grained authentication failed.	Contact customer service.
400	DBS.280066	Invalid log type.	Invalid log type.	Check whether the log type meets the requirements.
400	DBS.280067	Invalid start time.	Invalid start time.	Check whether the start time meets the requirement.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280068	Invalid end time.	Invalid end time.	Check whether the end time meets the requirement.
400	DBS.280110	The DB instance does not exist.	Instance not found.	Check whether the instance belongs to the tenant, whether the instance name or ID is correct, and whether the instance exists.
400	DBS.280122	Invalid DB engine.	Invalid storage API.	Check whether the storage engine matches the instance engine.
400	DBS.280123	Invalid node number.	Invalid node quantity.	Check whether the number of nodes meets the requirements.
400	DBS.280124	Invalid backup.	Invalid backup ID.	Check whether the backup ID is correct and meets the requirements.
400	DBS.280125	Invalid backup policy.	Invalid automated backup policy.	Check whether the automated backup policy meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280127	Invalid backup description.	Invalid backup description.	Check whether the backup description is correct and meets the requirements.
400	DBS.280200	The password contains invalid characters.	Password contains invalid characters.	Check whether the password is correct and meets the requirements.
400	DBS.280214	Invalid retention period.	Invalid retention period.	Check whether the backup retention period is correct.
400	DBS.280215	Invalid backup cycle.	Invalid backup cycle.	Check whether the backup start time, end time, and backup cycle are correct and meet the requirements.
400	DBS.280216	Invalid backup start time.	Invalid backup start time.	Check whether the backup start time meets the requirements and whether the relationship between the backup start time and end time is rational.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280234	Invalid DB instance name.	Invalid instance name.	Check whether the instance name is correct and whether the instance exists.
400	DBS.280235	Invalid database type.	Invalid DB API.	Check whether the DB engine name is correct.
400	DBS.280236	Invalid database version.	Invalid database version.	Check whether the database version is supported.
400	DBS.280239	Invalid specifications.	Invalid specifications.	Check whether specification code is correct and whether the specifications are available in the AZ.
400	DBS.280240	The specification does not exist.	Specification code not found.	Check whether the specification code is correct and the specifications are available.
400	DBS.280241	Invalid storage type.	Invalid storage type.	Check whether the storage type is correct and meets the requirements.
400	DBS.280242	The storage space is out of range.	Storage space is out of range.	Check whether the storage space is correct.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280244	Invalid AZ.	Invalid AZ.	Check whether parameters of the AZ are correct, whether the AZ exists, and whether the AZ matches the specifications.
400	DBS.280247	Invalid VPC.	Invalid VPC.	Check whether the VPC ID is correct and whether the VPC exists.
400	DBS.280248	Invalid subnet.	Invalid subnet.	Check whether the subnet ID is correct and whether the subnet exists.
400	DBS.280249	Invalid security group.	Invalid security group.	Check whether the security group ID is correct and whether the security group exists.
400	DBS.280251	Invalid backup period.	Invalid backup cycle.	Check whether the backup cycle meets the requirements.
400	DBS.280266	Invalid storage space.	Invalid storage space.	Check whether the storage space is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280267	Specifications not match.	Specifications do not match.	Check whether the specification information is correct and whether the specifications match the instance.
400	DBS.280269	Invalid Datastore Info.	Invalid database information.	Check whether datastore information is correct and meets the requirements.
400	DBS.280277	Invalid backup name.	Invalid backup name.	Check whether the backup name is correct and meets the requirements.
400	DBS.280280	Invalid DB instance number.	Invalid instance quantity.	Check whether the number of instances is correct and meets the requirements.
400	DBS.280284	Invalid IP address.	Invalid IP address.	Check whether the IP address is correct and meets the requirements.
400	DBS.280292	Invalid database username.	Invalid username.	Check whether the username is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280311	Invalid storage space.	Invalid storage space.	Check whether the storage space is correct and meets the requirements.
400	DBS.280314	Invalid storage space.	Invalid storage type.	Check whether the storage type is correct and whether the instance supports the disk type.
400	DBS.280327	Invalid node type.	Invalid node type.	Check whether the node type is correct, whether the node type matches the instance, and whether the node type matches the group ID and node ID.
400	DBS.280341	Invalid DB instance type.	Invalid instance type.	Check whether the GeminiDB APIs support the instance.
400	DBS.280342	Invalid DB instance mode.	Invalid instance type.	Check whether the instance type is correct and matches the instance ID.
400	DBS.280347	Unsupported database type.	Unsupported instance type.	Check whether the instance type is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280365	Invalid payment mode.	Invalid payment mode.	Check whether the payment mode is correct and meets the requirements.
400	DBS.280366	Invalid order ID.	Invalid order ID.	Check whether the yearly/monthly order ID is transferred and meets the requirements.
400	DBS.280391	Action check states.	Invalid action.	Check whether the input action meets the requirements.
400	DBS.280404	Invalid DB instance ID.	Invalid instance ID.	Check whether the instance ID is correct and meets the requirements.
403	DBS.280406	The DB instance cannot be deleted.	Instance cannot be deleted.	Check whether the DB API and billing mode support deletion of instances.
400	DBS.280407	Invalid node ID.	Invalid node ID.	Check whether the node ID is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280408	Invalid project id.	Invalid project ID.	Check whether the project ID is correct and meets requirements.
400	DBS.280414	Invalid group type.	Invalid group type.	Check whether the instance group type is correct and meets the requirements and whether it matches the instance and group ID.
400	DBS.280416	Invalid backup end time.	Invalid backup end time.	Check whether the backup end time is missing and whether the backup end time period and format meet the requirements.
400	DBS.280421	Invalid EIP.	Invalid EIP.	Check whether the EIP exists and meets the requirements.
403	DBS.280433	Invalid enterprise project ID.	Invalid enterprise project ID.	Check whether the enterprise project ID meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280434	The specifications are unavailable.	Invalid resource specification code.	Check whether the resource specification code exists and meets the requirements.
400	DBS.280437	Not support enterprise project.	Enterprise project not supported.	The current user has not enabled the enterprise project service. Enable it or do not transfer related parameters.
400	DBS.280438	Invalid encryption key.	Invalid storage encryption key ID.	Check whether there is a disk encryption key ID available in the request and whether the current DB API supports disk encryption.
400	DBS.280439	Invalid limit.	Invalid query limit.	Check whether the value of the limit parameter is valid.
400	DBS.280440	Invalid offset.	Invalid offset.	Check whether the value of the offset parameter is valid.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280441	Invalid key.	Invalid key.	Check whether the tag key is valid.
429	DBS.280443	The maximum number of connections has been reached.	Maximum connections reached.	Too frequent API requests. Try again later.
400	DBS.280444	Invalid value.	Invalid tag value.	Check whether the tag value is valid.
400	DBS.280445	The DB instance class is not available.	Unavailable instance specifications.	The current instance specifications are unavailable. Select another one.
400	DBS.280446	The database information does not exist.	Database information not found.	Check whether the datastore parameter exists.
400	DBS.280453	Invalid DSS storage pool ID.	Invalid DSS storage pool ID.	Check whether the storage pool ID is correct.
400	DBS.280465	Invalid password.	Invalid user password.	Check whether the user password meets the requirements.
400	DBS.280469	Invalid ECS group policy.	Invalid policy associated with the ECS group.	Check whether the policy associated with the ECS group is correct.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.280480	The target specification is same as current.	Target specifications are the same as current specifications.	Check whether the target specifications are the same as the current specifications.
400	DBS.280456	This operation is not supported by the current billing mode.	Current billing mode does not support this operation.	Check whether the billing mode of the current instance meets the API requirements.
400	DBS.290000	Parameter error.	Parameter error.	Check whether transferred parameters or URLs are correct and meet the requirements.
400	DBS.301024	Invalid backup restore information.	Invalid backup and restoration information.	Check whether the backup and restoration information is valid.
400	DBS.301040	The target security group is same as current.	Target security group is the same as current security group.	Check whether the target security group is the same as the current security group.
400	DBS.301071	Invalid session id.	Invalid session ID.	Check whether the session ID is correct and meets the requirements.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.301072	Invalid plan summary.	Invalid execution plan.	Check whether the execution plan is correct and meets the requirements.
400	DBS.301073	Invalid operation type.	Invalid operation type.	Check whether the operation type is correct and meets the requirements.
400	DBS.301074	Invalid namespace.	Invalid namespace.	Check whether the namespace is correct and meets the requirements.
400	DBS.301075	Invalid cost time.	Invalid execution time.	Check whether the execution time is correct and meets the requirements.
400	DBS.301076	Query session failed.	Querying session failed.	Contact customer service to check the instance status.
400	DBS.301077	Kill session failed.	Killing session failed.	Contact customer service to check the instance status.
400	DBS.03000001	The instance has not build biactive relationship.	Instance has no dual-active DR relationships.	Check whether the instance has a dual-active DR relationship.

HTTP Status Code	Error Code	Error Message	Description	Handling Measure
400	DBS.03000002	Invalid threshold.	Incorrect input threshold.	Check whether the input threshold meets the requirements.
400	DBS.03000003	Invalid step.	Inputting autoscaling increment failed.	Check whether the input increase step meets the requirements.
400	DBS.03000004	Invalid switch option.	Invalid parameter settings.	Check whether the input switch option is on or off .

8.4 Obtaining a Project ID

Scenarios

When calling APIs, you need to specify the project ID in some URLs. To do so, you need to obtain the project ID first.

You can obtain the required project ID with either of the following methods:

- [Obtaining the Project ID by Calling an API](#)
- [Obtaining a Project ID from the Console](#)

Obtaining the Project ID by Calling an API

You can obtain the project ID by calling the API used to [query project information based on the specified criteria](#).

The API used to obtain a project ID is **GET https://{Endpoint}/v3/projects/**. **{Endpoint}** is the IAM endpoint and can be obtained from [Regions and Endpoints](#). For details about API authentication, see [Authentication](#).

The following is an example response. The value of **id** is the project ID.

```
{  
  "projects": [  
    {  
      "domain_id": "65382450e8f64ac0870cd180d14e684b",  
      "is_domain": false,  
      "parent_id": "65382450e8f64ac0870cd180d14e684b",  
      "name": "project_name",  
      "description": "",  
    }  
  ]  
}
```

```
        "links": {
            "next": null,
            "previous": null,
            "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
        },
        "id": "a4a5d4098fb4474fa22cd05f897d6b99",
        "enabled": true
    ],
    "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects"
    }
}
```

Obtaining a Project ID from the Console

1. Sign up and log in to the management console.
2. Move your pointer over the username and select **My Credentials** in the displayed drop-down list.
On the **Projects** tab page, view project IDs.

Figure 8-1 Viewing project IDs

Region	Project Name	Project ID
AF-Johannesburg	af-south-1	[Redacted]
AP-Hong Kong	ap-southeast-1	[Redacted]

8.5 Metrics

Function

This section describes GeminiDB metrics reported to Cloud Eye as well as their namespaces and dimensions. You can use APIs provided by Cloud Eye to query metrics of monitored objects and alarms generated for GeminiDB.

Namespace

SYS.NoSQL

GeminiDB Redis Metrics

GeminiDB Influx Metrics

Table 8-3 GeminiDB Influx metrics

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
gemini_001_cp_u_usage	CPU Usage	CPU usage of the monitored system Unit: Percent	0–100	GeminiDB Influx instance node	1 minute
gemini_002_memory_usage	Memory Usage	Memory usage of the monitored system Unit: Percent	0–100	GeminiDB Influx instance node	1 minute
gemini_003_bytes_out	Network Output Throughput	Outgoing traffic in bytes per second Unit: kbit/s	≥ 0	GeminiDB Influx instance nodes	1 minute
gemini_004_bytes_in	Network Input Throughput	Incoming traffic in bytes per second Unit: kbit/s	≥ 0	GeminiDB Influx instance nodes	1 minute
nosql0_05_disk_usage	Storage Space Usage	Storage space usage of the monitored object. Unit: Percent	0–100	GeminiDB Influx instances	1 minute
nosql0_06_disk_total_size	Total Storage Space	Total storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Influx instances	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
nosql007_disk_used_size	Used Storage Space	Used storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Influx instances	1 minute
influxdb001_series_num	Time Series	Total number of time series Unit: count	≥ 0	GeminiDB Influx instance nodes	1 minute
influxdb002_query_req_ps	Query Requests Per Second	Number of query requests per second Unit: count/s	≥ 0	GeminiDB Influx instance nodes	1 minute
influxdb003_write_req_ps	Write Requests Per Second	Number of write requests per second Unit: count/s	≥ 0	GeminiDB Influx instance nodes	1 minute
influxdb004_write_points_ps	Write Points	Number of write points per second Unit: count/s	≥ 0	GeminiDB Influx instance nodes	1 minute
influxdb005_write_concurrency	Concurrent Write Requests	Number of concurrent write requests Unit: count	≥ 0	GeminiDB Influx instance nodes	1 minute
influxdb006_query_concurrency	Concurrent Queries	Number of concurrent query requests Unit: count	≥ 0	GeminiDB Influx instance nodes	1 minute

GeminiDB Cassandra Metrics

Table 8-4 GeminiDB Cassandra metrics

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
nosql0_05_disk_usage	Storage Space Usage	Storage space usage of the monitored object. Unit: Percent	0–100	GeminiDB Cassandra instances	1 minute
nosql0_06_disk_total_size	Total Storage Space	Total storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Cassandra instances	1 minute
nosql0_07_disk_used_size	Used Storage Space	Used storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Cassandra instances	1 minute
nosql0_09_dfv_write_delay	Storage Write Latency	Average delay of writing data to the storage layer in a specified period Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
nosql0_10_dfv_read_delay	Storage Read Latency	Average latency of reading data from the storage layer in a specified period Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
cassandradra001_cpu_usage	CPU Usage	CPU usage of an instance Unit: Percent	0–100	GeminiDB Cassandra instance nodes	1 minute
cassandradra002_mem_usage	Memory Usage	Memory usage of the instance Unit: Percent	0–100	GeminiDB Cassandra instance nodes	1 minute
cassandradra003_bytes_out	Network Output Throughput	Outgoing traffic in bytes per second Unit: byte/s	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandradra004_bytes_in	Network Input Throughput	Incoming traffic in bytes per second Unit: byte/s	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandradra014_connections	Active Node Connections	Total number of connections attempting to connect to Cassandra instance nodes Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandradra015_read_latency	Average Read Latency	Average amount of time consumed by read requests Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
cassandra016_write_latency	Average Write Latency	Average amount of time consumed by write requests Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra037_pending_write	Suspended Write Tasks	Number of write tasks in waiting status Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra038_pending_read	Suspended Read Tasks	Number of read tasks in waiting status Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra044_range_slice_latency	Scan Duration	Average amount of time consumed by scan operations Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra049_dropped_mutation	Dropped Writes	Average number of dropped writes Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra052_dropped_read	Dropped Reads	Average number of dropped reads Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra092_load_info	Data Volume on a Node	Data volume on a node Unit: byte	≥ 0	GeminiDB Cassandra instance nodes	1 minute

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
cassandra093_write_count_latency	Accumulated Write Requests	Total number of write requests initiated by a node Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra094_write_1min_rate	Average Write Rate in the Last Minute	Average write rate in the last minute Unit: count/s	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra095_write_p75_latency	p75 Write Latency	p75 write latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra096_write_p95_latency	p95 Write Latency	p95 write latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra097_write_p99_latency	p99 Write Latency	p99 write latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra098_read_count_latency	Accumulated Read Requests	Total number of read requests initiated by a node Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra099_read_1min_rate	Average Read Rate in the Last Minute	Average read rate in the last minute Unit: count/s	≥ 0	GeminiDB Cassandra instance nodes	1 minute

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
cassandra100_read_p75_latency	p75 Read Latency	p75 read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra101_read_p95_latency	p95 Read Latency	p95 read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra102_read_p99_latency	p99 Read Latency	p99 read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra103_range_slice_count_latency	Accumulated Range Read Requests	Accumulated range read requests Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra104_range_slice_1min_rate	Average Range Read Rate in the Last Minute	Average range read rate in the last minute Unit: count/s	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra105_range_slice_p75_latency	p75 Range Read Latency	p75 range read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra106_range_slice_p95_latency	p95 Range Read Latency	p95 range read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute

Metric ID	Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
cassandra107_range_slice_p99_latency	p99 Range Read Latency	p99 range read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra163_write_p999_latency	p999 Write Latency	p999 write latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra164_read_p999_latency	p999 Read Latency	p999 read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra165_large_partition_num	Big Keys	Number of big keys on the current node Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra166_write_max_latency	Maximum Write Latency	Maximum write latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra167_read_max_latency	Maximum Read Latency	Maximum read latency Unit: ms	≥ 0	GeminiDB Cassandra instance nodes	1 minute
cassandra168_imbalance_table_num	Tables with Uneven Data Distribution	Number of tables in which data is not evenly distributed. Unit: count	≥ 0	GeminiDB Cassandra instance nodes	1 minute

GeminiDB Mongo Metrics

Table 8-5 GeminiDB Mongo metrics

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
nosql001_cpu_usage	CPU Usage	CPU usage of the monitored system Unit: Percent	0–100	GeminiDB Mongo instance nodes	1 minute
nosql002_mem_usage	Memory Usage	Memory usage of the monitored system Unit: Percent	0–100	GeminiDB Mongo instance nodes	1 minute
nosql003_bytes_out	Network Output Throughput	Outgoing traffic in bytes per second Unit: bytes/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
nosql004_bytes_in	Network Input Throughput	Incoming traffic in bytes per second Unit: bytes/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
nosql005_disk_usage	Storage Space Usage	Storage space usage of the monitored object. Unit: Percent	0–100	GeminiDB Mongo instances	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
nosql006_disk_total_size	Total Storage Space	Total storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Mongo instances	1 minute
nosql007_disk_used_size	Used Storage Space	Used storage space of the monitored object. Unit: GB	≥ 0	GeminiDB Mongo instances	1 minute
mongodb0_01_command_ps	COMMAND Statements per Second	Number of COMMAND statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_02_delete_ps	DELETE Statements per Second	Number of DELETE statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_03_insert_ps	INSERT Statements per Second	Number of INSERT statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
mongodb0_04_query_ps	QUERY Statements per Second	Number of QUERY statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_05_update_ps	UPDATE Statements per Second	Number of UPDATE statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_06_getmore_ps	GETMORE Statements per Second	Number of GETMORE statements executed per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_07_connections	Current Active Connections	Total number of connections attempting to connect to DB instance nodes Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
mongodb0_07_connections_usage	Percentage of Active Node Connections	Percentage of the number of connections that attempt to connect to the instance node to the total number of available connections Unit: Percent	0–100	GeminiDB Mongo instance nodes	1 minute
mongodb0_08_mem_resident	Resident Memory	Size of resident memory The unit is MB.	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_09_mem_virtual	Virtual Memory	Size of the virtual memory The unit is MB.	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_10_regular_asserts_ps	Regular Asserts per Second	Number of regular asserts per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_11_warning_asserts_ps	Warning Asserts per Second	Number of warning asserts per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
mongodb0_12_msg_asserts_ps	Message Asserts per Second	Number of message asserts per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_13_user_asserts_ps	User Asserts per Second	Number of user asserts per second Unit: count/s	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_14_queues_total	Operations Queued Waiting for a Lock	Number of operations queued waiting for the lock Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_15_queues_readers	Operations Queued Waiting for a Read Lock	Number of operations queued waiting for the read lock Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_16_queues_writers	Operations Queued Waiting for a Write Lock	Number of operations queued waiting for the write lock Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_17_page_faults	Page Faults	Number of page faults on the monitored nodes Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute

Metric ID	Metric Name	Description	Value Range	Monitored Object	Monitoring Period (Raw Data)
mongodb0_18_porfling_num	Slow Queries	Number of slow queries on the monitored nodes Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_19_cursors_open	Maintained Cursors	Number of maintained cursors on the monitored nodes Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute
mongodb0_20_cursors_timeout	Timeout Cursors	Number of timed out cursors on the monitored nodes Unit: count	≥ 0	GeminiDB Mongo instance nodes	1 minute

Dimensions

Key	Value
cassandra_cluster_id,cassandra_node_id	Cluster ID or node ID of the GeminiDB Cassandra instance
redis_cluster_id,redis_node_id	Cluster ID or node ID of the GeminiDB Redis instance
influxdb_cluster_id,influxdb_node_id	Cluster ID or node ID of the GeminiDB Influx instance
mongodb_cluster_id,mongodb_node_id	Cluster ID or node ID of the GeminiDB Mongo instance

8.6 Events Supported by Event Monitoring

Table 8-6 Events Supported by Event Monitoring for GeminiDB

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
NoSQL	Instance creation failure	NoSQL CreateInstance Failed	Major	The instance quota or underlying resources are insufficient.	Release the instances that are no longer used and try to provision them again, or submit a service ticket to adjust the quota.	Instances fail to be created.
	Specifications change failure	NoSQL ResizeInstance Failed	Major	The underlying resources are insufficient.	Submit a service ticket to ask O&M personnel to coordinate resources, and then try again.	Services are interrupted.
	Node adding failure	NoSQL AddNodesFailed	Major	The underlying resources are insufficient.	Submit a service ticket to ask O&M personnel to coordinate resources, delete the node that failed to be added, and add a new one.	None
	Node deletion failure	NoSQL DeleteNodesFailed	Major	Releasing underlying resources failed.	Delete the node again.	None

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Storage space scale-up failure	NoSQL ScaleUpStorageFailed	Major	The underlying resources are insufficient.	Submit a service ticket to ask O&M personnel to coordinate resources, and then try again.	Services may be interrupted.
	Password resetting failure	NoSQL ResetPasswordFailed	Major	Resetting the password times out.	Reset the password again.	None
	Parameter template change failure	NoSQL UpdateInstanceParamGroupFailed	Major	Changing a parameter template times out.	Change the parameter template again.	None
	Backup policy configuration failure	NoSQL SetBackupPolicyFailed	Major	The database connection is abnormal.	Configure the backup policy again.	None
	Manual backup creation failure	NoSQL CreateManualBackupFailed	Major	The backup files fail to be exported or uploaded.	Submit a service ticket to O&M personnel.	Data cannot be backed up.
	Automated backup creation failure	NoSQL CreateAutomatedBackupFailed	Major	The backup files fail to be exported or uploaded.	Submit a service ticket to O&M personnel.	Data cannot be backed up.
	Instance status abnormal	NoSQL FaultyDBInstance	Major	This event is a key alarm event and is reported when an instance is faulty due to a disaster or a server failure.	Submit a service ticket.	The database service may be unavailable.

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Instance status recovery	NoSQL DBInstanceRecovered	Major	If a disaster occurs, NoSQL provides an HA tool to automatically or manually rectify the fault. After the fault is rectified, this event is reported.	No further action is required.	None
	Node status abnormal	NoSQL FaultyDBNode	Major	This event is a key alarm event and is reported when a database node is faulty due to a disaster or a server failure.	Check whether the database service is available and submit a service ticket.	The database service may be unavailable.
	Node status recovery	NoSQL DBNodeRecovered	Major	If a disaster occurs, NoSQL provides an HA tool to automatically or manually rectify the fault. After the fault is rectified, this event is reported.	No further action is required.	None
	Primary/standby switchover or failover	NoSQL PrimaryStandbySwitched	Major	This event is reported when a primary/secondary switchover or a failover is triggered.	No further action is required.	None

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Occurrence of hotspot partitioning keys	HotKey Occurs	Major	Hotspot data is stored in one partition because the primary key is improper. Improper application design causes frequent read and write operations on a key.	1. Choose a proper partition key. 2. Add service cache so that service applications read hotspot data from the cache first.	The service request success rate is affected, and the cluster performance and stability deteriorates.
	BigKey occurrence	BigKey Occurs	Major	The primary key design is improper. There are too many records or too much data in a single partition, causing load imbalance on nodes.	1. Choose a proper partition key. 2. Add a new partition key for hashing data.	As more and more data is stored in the partition, cluster stability deteriorates.

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Insufficient storage space	NoSQL RiskyDataDiskUsage	Major	The storage space is insufficient.	Scale up storage space. For details, see section "Scaling Up Storage Space" in the user guide of GeminiDB.	The instance is set to read-only and data cannot be written to the instance.
	Data disk expanded and being writable	NoSQL DataDiskUsageRecovered	Major	The data disk has been expanded and becomes writable.	No further action is required.	None
	Index creation failure	NoSQL CreateIndexFailed	Major	The service load exceeds what the instance specifications can take. In this case, creating indexes consumes more instance resources. As a result, the response is slow or even frame freezing occurs, and the creation times out.	Select matched instance specifications based on service load. Create indexes during off-peak hours. Create indexes in the background. Select indexes as required.	The index fails to be created or is incomplete. Delete the index and create a new one.

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Write speed decrease	NoSQL Stalling Occurs	Major	The write speed is close to the maximum write speed allowed by the cluster scale and instance specifications. As a result, the database flow control mechanism is triggered, and requests may fail.	1. Adjust the cluster scale or node specifications based on the maximum write rate of services. 2. Measure the maximum write rate of services.	The success rate of service requests is affected.
	Data write stopped	NoSQL StoppingOccurs	Major	The data write is too fast, reaching the maximum write capability allowed by the cluster scale and instance specifications. As a result, the database flow control mechanism is triggered, and requests may fail.	1. Change the cluster scale or node specifications based on the maximum write rate of services. 2. Measure the maximum write rate of services.	The success rate of service requests is affected.
	Database restart failure	NoSQL Restart DBFailed	Major	The instance status is abnormal.	Submit a service ticket to O&M personnel.	The instance status may be abnormal.

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Restoration to new instance failure	NoSQL Restore ToNewInstance Failed	Major	The underlying resources are insufficient.	Submit a service ticket to ask O&M personnel to coordinate resources, and then add new nodes.	Data cannot be restored to a new instance.
	Restoration to existing instance failure	NoSQL Restore ToExistInstance Failed	Major	The backup file fails to be downloaded or restored.	Submit a service ticket to O&M personnel.	The current instance may be unavailable.
	Backup file deletion failure	NoSQL DeleteBackupFailed	Major	The backup files fail to be deleted from OBS.	Delete the backup files again.	None
	Failure to display slow query logs in plaintext	NoSQL SwitchSlowlog PlainTextFailed	Major	The DB API does not support this function.	Refer to the <i>GeminiDB User Guide</i> to check whether that the DB API supports the display of slow query logs in plaintext. Submit a service ticket to O&M personnel.	None

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	EIP binding failure	NoSQL BindEip Failed	Major	The node status is abnormal, an EIP has been bound to the node, or the EIP to be bound is invalid.	Check whether the node is normal and whether the EIP is valid.	The instance cannot be accessed from a public network.
	EIP unbinding failure	NoSQL Unbind EipFailed	Major	The node status is abnormal or the EIP has been unbound from the node.	Check whether the node and EIP status are normal.	None
	Parameter modification failure	NoSQL Modify ParameterFailed	Major	The parameter value is invalid.	Check whether the parameter value is within the valid range and submit a service ticket to O&M personnel.	None
	Parameter template application failure	NoSQL ApplyParameterGroupFailed	Major	The instance status is abnormal. So, the parameter template cannot be applied.	Submit a service ticket to O&M personnel.	None
	Enabling or disabling SSL failure	NoSQL SwitchSSLFailed	Major	Enabling or disabling SSL times out.	Try again or submit a service ticket. Do not change the connection mode.	The SSL connection mode cannot be changed.

Event Source	Event Name	Event ID	Event Severity	Description	Solution	Impact
	Too much data in a single row	LargeRowOccurs	Major	If there is too much data in a single row, queries may time out, causing faults like OOM error.	1. Limit the write length of each column and row so that the key and value length of each row does not exceed the preset threshold. 2. Check whether there are abnormal writes or coding, causing large rows.	If there are too many records in a single row, cluster stability will deteriorate as the data volume increases.

A Change History

Released On	Description
2023-08-02	This issue is the twenty-seventh official release. Added the following API: Querying Regions Where a Dual-Active Relationship Can Be Created Between Two Instances
2023-04-28	This issue is the twenty-sixth official release. Added support for single-node GeminiDB Influx instances in Applying a Parameter Template . Added support for single-node GeminiDB Influx instances in Modifying Parameters of a Specified Instance .
2023-03-31	This issue is the twenty-fifth official release. Added the planned time when the API becomes unavailable and replacement API in Instance Specifications . Added the planned time when the API becomes unavailable and replacement API in Obtaining Parameter Templates . Added the planned time when the API becomes unavailable and replacement API in Querying an Instance by Tag .

Released On	Description
2023-03-06	<p>This issue is the twenty-fourth official release.</p> <p>Added the following APIs:</p> <p>Creating a Database Account</p> <p>Changing Permissions for a Database Account</p> <p>Resetting the Password of a Database Account</p> <p>Deleting a Database Account</p> <p>Obtaining the Database Account List</p> <p>Obtaining All Databases in an Instance</p>
2022-10-30	<p>This issue is the twenty-third official release.</p> <p>Added the following APIs:</p> <p>Checking Password Strength</p> <p>Changing a Database Port</p> <p>Configuring Access to a Replica Set Across CIDR Blocks</p> <p>Deleting the Node that Fails to Be Added</p> <p>Querying IP Addresses Required for Creating an Instance or Adding Nodes</p> <p>Configuring the Autoscaling Policy of Storage Space</p> <p>Comparing Parameter Templates</p> <p>Replicating a Parameter Template</p> <p>Querying API that Support Parameter Templates</p> <p>Querying Database Error Logs</p> <p>Setting the Desensitization Status of Slow Query Logs</p>

Released On	Description
2022-09-30	<p>This issue is the twenty-second official release.</p> <p>Added the following APIs:</p> <p>Querying Instances that a Parameter Template Can Be Applied To</p> <p>Viewing Parameter Change History of an Instance</p> <p>Viewing Application Records of a Parameter Template</p> <p>Creating Cold Storage</p> <p>Scaling Up Cold Storage</p> <p>Binding/Unbinding an EIP</p> <p>Enabling or Disabling SSL</p> <p>Restarting an Instance</p> <p>Configuring an Autoscaling Policy for Storage Space</p> <p>Pausing/Resuming Data Synchronization Between Two Instances with a DR Relationship</p> <p>Creating a Manual Backup</p>
2022-08-30	<p>This issue is the twenty-first official release.</p> <p>Added the following APIs:</p> <p>Querying Instances that Can Be Restored</p> <p>Querying the Time Window When a Backup Can Be Restored</p> <p>Deleting a Manual Backup</p> <p>Restoring Data to an Existing Instance</p>
2022-07-30	<p>This is the twentieth official release.</p> <p>Added the following APIs:</p> <p>Obtaining Role Information of a DR Instance</p> <p>Promoting a DR Instance from Standby to Primary</p> <p>Demoting a DR Instance from Primary to Standby</p>

Released On	Description
2022-07-15	<p>This issue is the nineteenth official release.</p> <p>Added the following APIs:</p> <p>Checking Whether a DR Relationship Can Be Created with or Deleted from a Specified Instance</p> <p>Creating a DR Relationship with a Specified Instance</p> <p>Deleting a DR Relationship from a Specific Instance</p>
2022-07-01	<p>This is the eighteenth official release.</p> <p>Added information about patch installation of GeminiDB Cassandra in Upgrading Minor Version.</p> <p>Added information about adding nodes for a GeminiDB Influx instance in Adding Nodes for an Instance.</p>
2022-06-02	<p>This issue is the seventeenth official release.</p> <p>Added parameters lb_port and subnet_id in Querying Instances and Details.</p> <p>Added parameter subnet_id in Adding Nodes for an Instance.</p>
2022-03-18	<p>This issue is the sixteenth official release.</p> <ul style="list-style-type: none">Added the description of removing nodes from a yearly/monthly GeminiDB Cassandra instance in Deleting Nodes from a Specified Instance.
2021-09-03	<p>This issue is the fifteenth official release.</p> <p>Added the description of changing GeminiDB Redis instance specifications in Changing Specifications of an Instance.</p>
2021-08-27	<p>This issue is the fourteenth official release.</p> <p>Added an API (Querying Dedicated Resources).</p> <p>Added the dedicated_resource_id parameter in Creating an Instance and Querying Instances and Details.</p>

Released On	Description
2021-07-30	<p>This is the thirteenth official release.</p> <ul style="list-style-type: none">Added parameters offset and limit in Querying Instance Specifications and Obtaining Parameter Templates.Changed resource_instances to resource_instances in Querying an Instance by Tag.Added the following APIs for GeminiDB Redis:<ul style="list-style-type: none">Querying Version InformationQuerying Instance SpecificationsCreating an InstanceDeleting an InstanceQuerying Instances and DetailsScaling Up Storage Space of an InstanceAdding Nodes for an InstanceDeleting Nodes from a Specified InstanceResetting the Administrator Password of an InstanceEditing the Name of an InstanceChanging the Security Group of an InstanceAdded the following APIs for GeminiDB Influx: Changing the Security Group of an InstanceAdded the following APIs for GeminiDB Mongo:<ul style="list-style-type: none">Scaling Up Storage Space of an InstanceResetting the Administrator Password of an InstanceEditing the Name of an InstanceChanging the Security Group of an Instance
2021-05-18	<p>This issue is the twelfth official release.</p> <p>Added English error information in Error Codes.</p>
2021-04-15	<p>This issue is the eleventh official release.</p> <p>Updated GeminiDB Redis metrics.</p>

Released On	Description
2020-12-30	<p>This is the tenth official release.</p> <p>GeminiDB Influx supports the following APIs:</p> <p class="list-item-l1">Querying Version Information</p> <p class="list-item-l1">Querying Instance Specifications</p> <p class="list-item-l1">Creating an Instance</p> <p class="list-item-l1">Deleting an Instance</p> <p class="list-item-l1">Querying Instances and Details</p> <p class="list-item-l1">Scaling Up Storage Space of an Instance</p> <p class="list-item-l1">Resetting the Administrator Password of an Instance</p> <p class="list-item-l1">Editing the Name of an Instance</p> <p class="list-item-l1">Querying an Automated Backup Policy</p> <p class="list-item-l1">Configuring an Automated Backup Policy</p>
2020-11-30	<p>This is the ninth official release.</p> <p>GeminiDB Influx supports the following APIs:</p> <ul style="list-style-type: none">• Obtaining Parameter Templates• Creating a Parameter Template• Modifying Parameters in a Parameter Template• Applying a Parameter Template• Modifying Parameters of a Specified Instance• Obtaining Parameters of a Specified Parameter Template• Querying Instance Parameter Settings• Deleting a Parameter Template
2020-10-30	<p>This is the eighth official release.</p> <p>Supported up to 20 resource tags.</p> <p>Added the description about storage increase step (1) in Scaling Up Storage Space of an Instance.</p>

Released On	Description
2020-09-30	<p>This issue is the seventh official release.</p> <p>GeminiDB Mongo supports the following APIs:</p> <ul style="list-style-type: none">• Creating an Instance• Deleting an Instance• Obtaining Parameter Templates• Creating a Parameter Template• Modifying Parameters in a Parameter Template• Applying a Parameter Template• Modifying Parameters of a Specified Instance• Querying Instance Parameter Settings• Obtaining Parameters of a Specified Parameter Template• Deleting a Parameter Template

Released On	Description
2020-08-30	<p>This is the sixth official release.</p> <ul style="list-style-type: none">● Added two GeminiDB Influx metrics that can be reported to Cloud Eye.● Added 30 GeminiDB Redis metrics.● Listed GeminiDB Mongo instances as supported instances in Querying Instances and Details, Querying Version Information, and Querying Instance Specifications.● Added Obtaining Parameter Templates.● Added Creating a Parameter Template.● Added Modifying Parameters in a Parameter Template.● Added Applying a Parameter Template.● Added Modifying Parameters of a Specified Instance.● Added Querying Instance Parameter Settings.● Added Obtaining Parameters of a Specified Parameter Template.● Added Deleting a Parameter Template.● Added Changing Specifications of an Instance.● Added Resetting the Administrator Password of an Instance.● Added Editing the Name of an Instance.● Added Changing the Security Group of an Instance.● Added Querying an Automated Backup Policy.● Added Configuring an Automated Backup Policy.
2020-07-30	<p>This issue is the fifth official release.</p> <ul style="list-style-type: none">● Added the description of yearly/monthly instances in Creating an Instance and Querying Instances and Details.● Added Scaling Up Storage Space of an Instance.● Added Adding Nodes for an Instance.● Added Deleting Nodes from a Specified Instance.

Released On	Description
2020-04-30	This is the fourth official release. Added new metrics.
2020-03-31	This is the third official release. Added Introduction . Added GeminiDB Actions . Added some metrics.
2020-03-13	This is the second official release. Added Querying Database Slow Logs .
2019-11-18	This issue is the first official release.