

TaurusDB

API Reference

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1 Before You Start

Overview

TaurusDB is an enterprise-grade cloud-native database service fully compatible with MySQL. It decouples compute from storage and uses Huawei-developed Data Function Virtualization (DFV), which scales to up to 128 TB per instance. With TaurusDB, there is no need to worry about data loss. It provides the high availability and superior performance of commercial databases at the price of open-source databases.

NOTE

Data Function Virtualization (DFV) is a high-performance and high-reliability distributed storage system that is vertically integrated with databases. Storage clusters are deployed in pools to improve storage utilization.

This document describes how to use application programming interfaces (APIs) to perform operations on DB instances. For details about all supported operations, see [API Overview](#).

API Calling

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

Endpoints

An endpoint is the **request address** for calling an API. Endpoints vary depending on services and regions. [Table 1-1](#) lists the endpoints provided by TaurusDB.

Table 1-1 TaurusDB endpoints

Product	Region Name	Region	Endpoint	Protocol
TaurusDB	CN North-Beijing4	cn-north-4	gaussdb.cn-north-4.myhuaweicloud.com	HTTPS

Product	Region Name	Region	Endpoint	Protocol
TaurusDB	CN North-Ulanqab1	cn-north-9	gaussdb.cn-north-9.myhuaweicloud.com	HTTPS
TaurusDB	CN East-Shanghai1	cn-east-3	gaussdb.cn-east-3.myhuaweicloud.com	HTTPS
TaurusDB	CN South-Guangzhou	cn-south-1	gaussdb.cn-south-1.myhuaweicloud.com	HTTPS
TaurusDB	CN South-Guangzhou-InvitationOnly	cn-south-4	gaussdb.cn-south-4.myhuaweicloud.com	HTTPS
TaurusDB	TR-Istanbul	tr-west-1	gaussdbformysql.tr-west-1.myhuaweicloud.com	HTTPS
TaurusDB	CN Southwest-Guiyang1	cn-southwest-2	gaussdb.cn-southwest-2.myhuaweicloud.com	HTTPS
TaurusDB	AP-Singapore	ap-southeast-3	gaussdb.ap-southeast-3.myhuaweicloud.com	HTTPS
TaurusDB	AP-Bangkok	ap-southeast-2	gaussdbformysql.ap-southeast-2.myhuaweicloud.com	HTTPS
TaurusDB	AP-Jakarta	ap-southeast-4	gaussdb.ap-southeast-4.myhuaweicloud.com	HTTPS
TaurusDB	CN North-Beijing2	cn-north-2	gaussdb.cn-north-2.myhuaweicloud.com	HTTPS
TaurusDB	CN-Hong Kong	ap-southeast-1	gaussdbformysql.ap-southeast-1.myhuaweicloud.com	HTTPS
TaurusDB	LA-Sao Paulo1	sa-brazil-1	gaussdb.sa-brazil-1.myhuaweicloud.com	HTTPS
TaurusDB	RU-Moscow2	ru-northwest-2	gaussdb.ru-northwest-2.myhuaweicloud.com	HTTPS

Product	Region Name	Region	Endpoint	Protocol
TaurusDB	AF-Johannesburg	af-south-1	gaussdb-mysql.af-south-1.myhuaweicloud.com	HTTPS
TaurusDB	CN North-Ulanqab-Auto1	cn-north-11	gaussdbformysql.cn-north-11.myhuaweicloud.com	HTTPS
TaurusDB	ME-Riyadh	me-east-1	gaussdb-mysql.me-east-1.myhuaweicloud.com	HTTPS
TaurusDB	CN North-Ulanqab201	cn-north-5	gaussdbformysql.cn-north-5.myhuaweicloud.com	HTTPS

Constraints

- Currently, APIs cannot be called for single-node instances.
- For more constraints, see API description.

Concepts

- Account

An account is created after your registration. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity and should not be used directly to perform routine management. 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, username, and password.
- Region

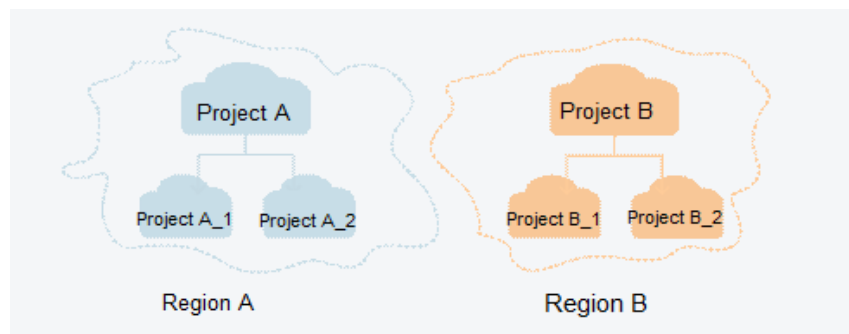
A region is a geographic area in which cloud resources are deployed. Availability zones (AZs) in the same region can communicate with each other over an intranet, while AZs in different regions are isolated from each other. Deploying cloud resources in different regions can better suit certain user requirements 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 interconnected using high-speed optical fibers to allow users to build cross-AZ high-availability systems.

- Project

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

Figure 1-1 Project isolation model



- Enterprise Project

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

For more information about enterprise projects and how to obtain enterprise project IDs, see [Enterprise Management User Guide](#).

2 API Overview

With TaurusDB APIs, you can query, set, and modify resource quotas.

Category	Description
DB Engine Version Queries	API used to query the version information of a specified DB engine
Database Specification Queries	API used to query the database specifications of a specified DB engine version
Instance Management	APIs used to create, reboot, and delete TaurusDB instances, and modify instance information
Backup Management	APIs used to create, configure, and delete TaurusDB backups
Parameter Template Management	APIs used to create, modify, replicate, compare, and delete TaurusDB parameter templates
Quota Management	APIs used to set and modify TaurusDB quotas
Database Proxy	APIs used to create a proxy instance, add proxy nodes, change the specifications of a proxy instance, and modify proxy instance information
Log Management	APIs used to enable, configure, and disable TaurusDB logs
Tag Management	APIs used to add and delete TaurusDB tags
Database User Management	APIs used to create, authorize, and delete TaurusDB database users, and modify database user information
Database Management	APIs used to create and delete TaurusDB databases, and modify database information

Category	Description
Traffic Management	APIs used to enable, configure, and disable TaurusDB SQL throttling
Task Center	APIs used to query, cancel, and delete tasks in the TaurusDB task center
Intelligent Diagnosis	APIs used to query the number of instances whose metrics are abnormal and query instance information
HTAP (Standard Edition)	APIs used to create, reboot, and delete standard HTAP instances, and synchronize data

3 Calling APIs

3.1 Making an API Request

This section describes the structure of a REST API, and uses the IAM API for [creating an IAM user](#) 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:

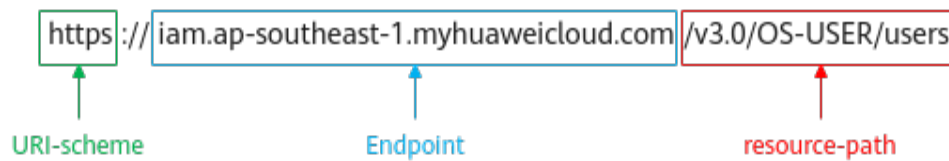
{URI-scheme}://{Endpoint}/{resource-path}?{query-string}

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

- **URI-scheme:** protocol used to transmit requests. All APIs use HTTPS.
- **Endpoint:** domain name or IP address of the server where the REST service is deployed. The endpoint varies depending on services and regions. Obtain the value 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:** API access path. Obtain the value from the URI of an API. For example, the **resource-path** of the API for creating an IAM user is **/v3.0/OS-USER/users**.
- **query-string:** query parameters, which are optional. Ensure that a question mark (?) is included in front of each query parameter that is in the format of *<parameter-name>=<parameter-value>*. For example, **?limit=10** indicates that a maximum of 10 data records will be queried.

IAM is a global service. You can create an IAM user using the endpoint of IAM in any region. For example, to create an IAM user in the CN-Hong Kong region, obtain the endpoint of IAM (**iam.ap-southeast-1.myhuaweicloud.com**) for this region and the **resource-path** (**/v3.0/OS-USER/users**) in the URI of the API for [creating an IAM user](#). Then, construct the URI as follows:

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


Figure 3-1 Example URI**NOTE**

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

Request Methods

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

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

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

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

Request Header

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

Common request header fields are as follows:

- **Content-Type:** request body type or format. This field is mandatory and its default value is **application/json**. Other values of this field will be provided for specific APIs if any.
- **Authorization:** signature authentication information. This field is optional. When AK/SK-based authentication is enabled, this field is automatically specified when SDK is used to sign the request. For more information, see [AK/SK-based Authentication](#).
- **X-Sdk-Date:** time when a request is sent. This field is optional. When AK/SK-based authentication is enabled, this field is automatically specified when SDK is used to sign the request. For more information, see [AK/SK-based Authentication](#).
- **X-Auth-Token:** user token only for token-based API authentication. It is a response to the API for [obtaining a user token](#) (this is the only API that does not require authentication).

- **X-Project-ID**: subproject ID. This field is optional and can be used in multi-project scenarios. It is mandatory in the request header for accessing resources in a subproject through AK/SK-based authentication.
- **X-Domain-ID**: account ID. This field is optional. It is mandatory in the request header for calling APIs of global services through AK/SK-based authentication.

The API used to [create an IAM user](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

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

(Optional) Request Body

This part is optional. The body of a request 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.

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

The following shows an example request (a request body included) of the API for [creating an IAM user](#). You can learn about request parameters and related description from this example. The bold parameters need to be replaced for a real request.

- **accountid**: account ID of an IAM user
- **username**: name of an IAM user
- **email**: email of an IAM user
- *********: login password of an IAM user

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

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

If all data required for the API request is available, you can send the request to call the API through [curl](#), [Postman](#), or coding.

3.2 Authentication

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

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

AK/SK-based Authentication

NOTE

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

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

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

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

NOTICE

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

Token-based Authentication

NOTE

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

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

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

```
{  
  "auth": {  
    "identity": {
```

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

In [Making an API Request](#), the process of calling the API used to **obtain a user token** is described.

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

```
Content-Type: application/json
X-Auth-Token: ABCDEFG....
```

3.3 Response

Status Code

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

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

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

Response Header

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

[Figure 3-2](#) shows the response header for the API used to **obtain a user token**. The **x-subject-token** header field is the desired user token. This token can then be used to authenticate the calling of other APIs.

Figure 3-2 Header fields of the response to the request for obtaining a user token

```
connection → keep-alive
content-type → application/json
date → Tue, 12 Feb 2019 06:52:13 GMT
server → Web Server
strict-transport-security → max-age=31536000; includeSubdomains;
transfer-encoding → chunked
via → proxy A
x-content-type-options → nosniff
x-download-options → noopen
x-frame-options → SAMEORIGIN
x-iam-trace-id → 218d45ab-d674-4995-af3a-2d0255ba41b5
x-subject-token → MIIYXQYJKoZIhvcNAQcCoIIYTCCEoCAQExDQALBgIghkgBZQMEAgEwgharBgkqhkiG9w0BBwGgghacBIWmHsidG9rZW4iOnsiZXhwaXJlc19hdCI6IiwMTktMDItMTNUMC
fj3KJs6YgKnpVNRbW2eZ5eb78SZOkqjACgklqO1wi4JIGzrpd18LGXK5bdfq4lqHCYb8P4NaY0NYejcAgz/VeFYtLWT1GSO0zxKZmlQHq82HBqHdglZO9fuEbL5dMhdavj+33wEI
xHRCE9I87o+k9-
j+CMZSEB7bUGd5Uj6eRASXl1jipPEGA270g1FrUooL6jgglFkNPQuFSOU8+uSsttVwRtNfsc+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-
RzT6MUbpvGw-oPNFYxJECKnoH3HROzv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

(Optional) Response Body

This part is optional. The body of a response is often returned in structured format (for example, JSON or XML) as specified in the **Content-Type** header field. The response body transfers content except the response header.

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

```
{
  "token": {
    "expires_at": "2019-02-13T06:52:13.855000Z",
    "methods": [
      "password"
    ],
    "catalog": [
      {
        "endpoints": [
          {
            "region_id": "az-01",
            .....

```

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

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

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

4 APIs (Recommended)

4.1 DB Engine Version Queries

4.1.1 Querying Version Information About a DB Engine

Function

This API is used to query the version information of a specified DB engine. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/datastores/{database_name}

Table 4-1 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
database_name	Yes	String	Definition DB engine. Constraints N/A Range gaussdb-mysql Default Value N/A

Request Parameters

Table 4-2 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-3 Response body parameter

Parameter	Type	Description
datastores	Array of MysqlEngineVersionInfo objects	Definition DB versions.

Table 4-4 MysqlEngineVersionInfo

Parameter	Type	Description
id	String	Definition DB version ID. The value is unique. Range N/A
name	String	Definition DB version number. Only the two-number major version is returned. Range N/A
version	String	Definition Compatible open-source DB version. A three-number open-source version is returned. Range N/A
kernel_version	String	Definition DB kernel version. A complete four-number version is returned. Range N/A

Status code: 400**Table 4-5** Response body parameters

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

Status code: 500**Table 4-6** Response body parameters

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

Example Request

Querying version information about a TaurusDB instance

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/datastores/gaussdb-mysql
```

Example Response

Status code: 200

Success.

```
{
  "datastores" : [ {
    "id" : "87620726-6802-46c0-9028-a8785e1f1921",
    "name" : "8.0",
    "version" : "8.0.22",
    "kernel_version" : "2.0.28.18"
  } ]
}
```

Status Code

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

Error Code

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

4.2 Database Specification Queries

4.2.1 Querying Database Specifications

Function

This API is used to query the database specifications of a specified DB engine version. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
GET /v3/{project_id}/flavors/{database_name}
```

Table 4-7 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
database_name	Yes	String	Definition DB engine name. Constraints N/A Range gaussdb-mysql Default Value N/A

Table 4-8 Query parameters

Parameter	Mandatory	Type	Description
availability_zone_mode	Yes	String	Definition AZ type. Constraints N/A Range • single: single AZ • multi: multiple AZs Default Value single

Parameter	Mandatory	Type	Description
version_name	No	String	Definition DB version number. Constraints Currently, only MySQL 8.0 is supported. Range 8.0 Default Value 8.0
spec_code	No	String	Definition Resource specification code. Example: gaussdb.mysql.xlarge.x86.4 • gaussdb.mysql indicates the product. • xlarge indicates the specifications (4 vCPUs). • x86 indicates the x86 architecture. • 4 indicates the ratio of vCPUs to memory is 1:4. For more information, see Instance Specifications. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-9 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 202**Table 4-10** Response body parameter

Parameter	Type	Description
flavors	Array of MysqlFlavors Info objects	Definition Instance specifications.

Table 4-11 MysqlFlavorsInfo

Parameter	Type	Description
vcpus	String	Definition Number of vCPUs. For example, the value 1 indicates 1 vCPU. Range N/A
ram	String	Definition Memory size in GB. Range N/A
type	String	Definition CPU architecture. Range • arm: exclusive Arm • x86: exclusive x86 • generalX86: general-purpose x86
id	String	Definition Specification ID, which uniquely identifies a specification. Range N/A
spec_code	String	Definition Resource specification code. Its value is same as the value of spec_code . Example: gaussdb.mysql.xlarge.x86.4 • gaussdb.mysql indicates the product. • xlarge indicates the specifications (4 vCPUs). • x86 indicates the x86 architecture. • 4 indicates the ratio of vCPUs to memory is 1:4. For more information, see Instance Specifications . Range N/A
version_name	String	Definition DB version number. Range 8.0

Parameter	Type	Description
instance_mode	String	Definition Instance type. Currently, only the cluster type is supported. Range Cluster
az_status	Map<String,String>	Definition Status of the specification in the AZ. Range • normal: The specification is available in the AZ. • unsupported: The specification is not supported. • sellout: The specification is sold out.

Status code: 400

Table 4-12 Response body parameters

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

Status code: 500

Table 4-13 Response body parameters

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

Example Request

Querying specific specifications of a TaurusDB instance

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/flavors/gaussdb-mysql?version_name=8.0&spec_code=gaussdb.mysql.xlarge.x86.4&availability_zone_mode=single
```

Example Response

Status code: 202

Success.

```
{
  "flavors": [ {
    "vcpus": "4",
    "ram": "16",
    "type": "x86",
    "id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
    "spec_code": "gaussdb.mysql.xlarge.x86.4",
    "instance_mode": "Cluster",
    "version_name": "8.0",
    "az_status": {
      "az1": "normal",
      "az2": "normal"
    }
  }
]
```

Status Code

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

Error Code

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

4.3 Instance Management

4.3.1 Creating a DB Instance

Function

This API is used to create a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances

Table 4-14 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-15 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-16 Request body parameters

Parameter	Mandatory	Type	Description
region	Yes	String	Definition Region ID. Constraints N/A Range For details, see Regions and Endpoints . Default Value N/A
name	Yes	String	Definition Instance name. Constraints Instances of the same type can have the same name under the same tenant. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
datastore	Yes	MysqlDatastoreInReq object	Definition Database information. Constraints N/A
mode	Yes	String	Definition Instance type. Constraints Currently, only the cluster type is supported. Range Cluster Default Value N/A
flavor_ref	Yes	String	Definition Specification code. For details, see spec_code in Table 5 in Querying Database Specifications . Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
vpc_id	Yes	String	Definition VPC ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and view the VPC ID on the VPC details page. • Method 2: Query the VPC ID through the VPC API. For details, see Querying VPCs. Constraints N/A Range N/A Default Value N/A
subnet_id	Yes	String	Definition Subnet ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: Query the subnet ID through the VPC API. For details, see Querying Subnets. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
password	Yes	String	Definition Database password. Constraints You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. If you enter a weak password, the system automatically determines that the password is invalid. Range The password can consist of 8 to 32 characters and must contain at least three types of the following: uppercase letters, lowercase letters, digits, and special characters .~!@#\$\$%^*_-=+?,()& Default Value N/A
availability_zone_mode	Yes	String	Definition AZ type. Constraints N/A Range • single: single AZ • multi: multiple AZs Default Value N/A
slave_count	Yes	Integer	Definition Number of read replicas. Constraints A maximum of nine read replicas can be created at a time. Range 1–9 Default Value N/A

Parameter	Mandatory	Type	Description
charge_info	Yes	MysqlChargeInfo object	Definition Billing mode, which is yearly/ monthly or pay-per-use (default setting). Constraints You cannot create yearly/ monthly instances in a DeC.
security_group_id	No	String	Definition Security group ID. To obtain this value, use either of the following methods: • Method 1: Log in to VPC console. Choose Access Control > Security Groups in the navigation pane. 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 ID through the VPC API. For details, see Querying Security Groups. Constraints If a network ACL is enabled for the subnet used by the created instance, this parameter is optional. If a network ACL is not enabled, this parameter is mandatory. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
configuration_id	No	String	Definition Parameter template ID. For details, see id in Table 5 in Querying Parameter Templates . Constraints N/A Range N/A Default Value N/A
backup_strategy	Yes	MysqlBackupStrategy object	Definition Automated backup policy. Constraints N/A
time_zone	No	String	Definition Time zone. Constraints N/A Range All the full hours from UTC-11:00 to UTC+12:00. Default Value UTC
master_availability_zone	No	String	Definition Primary AZ ID. Constraints This parameter is optional for a single-AZ instance and mandatory for a multi-AZ instance. Range For details, see Regions and Endpoints . Default Value N/A

Parameter	Mandatory	Type	Description
volume	No	MysqlVolume object	Definition Volume information. Constraints This parameter is only available for yearly/monthly instances. It is not available for pay-per-use instances.
tags	No	Array of MysqlTags objects	Definition Tag list. Each instance can be associated with tag key-value pairs while being created. Constraints • <i>{key}</i> indicates the tag key. It must be unique and cannot be empty. • <i>{value}</i> indicates the tag value, which can be empty. If you want to create instances with multiple tag key-value pairs, separate them with commas (,). A maximum of 20 key-value pairs can be added for an instance.
lower_case_table_names	No	Integer	Definition Whether table names are case sensitive. Constraints This parameter cannot be changed after the instance is created. Range • 0: Table names are stored as specified and are case sensitive. • 1: Table names are stored in lowercase and are case insensitive. Default Value 1

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Definition Enterprise project ID. Constraints This parameter is mandatory when the enterprise project is enabled. Range N/A Default Value N/A
dedicated_resource_id	No	String	Definition ID of the dedicated resource pool. Constraints This parameter is only available when the dedicated resource pool is enabled. Range N/A Default Value N/A
restore_point	No	MysqlRestorePoint object	Definition Backup information. Constraints N/A
tde_info	No	MysqlTdeInfo object	Definition TDE configuration. The AES-256 and SM4 algorithms are supported. Constraints TDE is in the open beta test (OBT) phase. To use it, submit a service ticket.

Table 4-17 MysqlDatastoreInReq

Parameter	Mandatory	Type	Description
type	Yes	String	Definition DB engine. Constraints Only gaussdb-mysql is supported. Range gaussdb-mysql Default Value N/A
version	Yes	String	Definition DB version. Constraints N/A Range Enter a two-number major version. For details about how to obtain the version, see the name field returned in Querying Version Information About a DB Engine . Default Value N/A
kernel_version	No	String	Definition DB kernel version. If you need to specify a kernel version, contact customer service. Constraints N/A Range Enter a complete four-number kernel version. For details about how to obtain the value, see the kernel_version field returned in Querying Version Information About a DB Engine . Default Value N/A

Table 4-18 MysqlChargeInfo

Parameter	Mandatory	Type	Description
charge_mode	Yes	String	Definition Billing mode. Constraints N/A Range • prePaid: yearly/monthly • postPaid: pay-per-use Default Value postPaid
period_type	No	String	Definition Subscription period type in yearly/monthly mode. Constraints This parameter is only available and mandatory when charge_mode is set to prePaid . Range • month: The service is subscribed by month. • year: The service is subscribed by year. Default Value N/A

Parameter	Mandatory	Type	Description
period_num	No	Integer	Definition Subscription period in yearly/ monthly mode. Constraints This parameter is only available and mandatory when charge_mode is set to prePaid. Range - When period_type is set to month, the parameter value ranges from 1 to 9. - When period_type is set to year, the parameter value ranges from 1 to 3. Default Value N/A
is_auto_renew	No	String	Definition 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 subscription renewal. Constraints This parameter is only available when charge_mode is set to prePaid. Range true: Automatic renewal is enabled. false: Automatic renewal is disabled. Default Value false

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Definition Whether the order will be automatically paid after yearly/monthly instances are created. This parameter does not affect the payment method of automatic renewal. Constraints This parameter is only available when charge_mode is set to prePaid . Range • true: The order will be automatically paid. • false: The order will be manually paid. Default Value true

Table 4-19 MysqlBackupStrategy

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00. Default Value N/A

Parameter	Mandatory	Type	Description
keep_days	No	String	Definition Retention period of automated backups. Constraints The value must be a positive integer. Range 1–732 Default Value N/A

Table 4-20 MysqlVolume

Parameter	Mandatory	Type	Description
size	Yes	String	Definition Disk size, in GB. Constraints The value must be an integer multiple of 10. Range 10–128000 Default Value 10

Table 4-21 MysqlTags

Parameter	Mandatory	Type	Description
key	Yes	String	Definition Tag key. Constraints It cannot be an empty string, a space, or left blank. Range The value contains a maximum of 36 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A
value	Yes	String	Definition Tag value. Constraints It can be an empty string. Range The value contains a maximum of 43 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Table 4-22 MysqlRestorePoint

Parameter	Mandatory	Type	Description
source_instance_id	Yes	String	Definition Source instance ID. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
restore_time	No	Long	Definition Point in time when the backup is to be restored. Constraints The value is a Unix timestamp in milliseconds and represents UTC time. When specifying the parameter, convert the local time from your relevant time zone to a UTC timestamp first. Range To obtain this value, see Querying the Restoration Time Range . Default Value N/A
backup_id	No	String	Definition Backup file ID. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
type	No	String	Definition Backup type. Constraints If this parameter is left blank, backup_id cannot be left blank and data is restored using backup files by default. Range If this parameter is not left empty, the value can be: • backup: Data is restored using backups. • timestamp: Data is restored to a point in time. Default Value N/A

Table 4-23 MysqlTdeInfo

Parameter	Mandatory	Type	Description
enable_tde	Yes	Boolean	Definition Whether to enable TDE. Constraints N/A Range • true: TDE is enabled. • false: TDE is disabled. Default Value N/A
encryption_type	Yes	String	Definition TDE algorithm. Constraints N/A Range • AES256 • SM4 Default Value N/A

Response Parameters

Status code: 201

Table 4-24 Response body parameters

Parameter	Type	Description
instance	MysqlInstanceResponse object	Definition Instance information.
job_id	String	Definition ID of the task for creating an instance. This parameter is only returned for pay-per-use instances. Range N/A
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly instances. Range N/A

Table 4-25 MysqlInstanceResponse

Parameter	Type	Description
id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range The value is the same as the instance name in the request.
status	String	Definition Instance status. Range N/A

Parameter	Type	Description
datastore	MysqlDatastore object	Definition Database information.
mode	String	Definition Instance type. Range The value is the same as the instance type in the request.
configuration_id	String	Definition Parameter template ID. Range N/A
port	String	Definition Database port. Range N/A
backup_strategy	MysqlBackupStrategy object	Definition Automated backup policy. Constraints N/A
enterprise_project_id	String	Definition Enterprise project ID. Range The value is the same as the enterprise project ID in the request.
region	String	Definition Region ID. Range The value is the same as the region ID in the request.
availability_zone_mode	String	Definition AZ type. Range The value is the same as the AZ type in the request.

Parameter	Type	Description
master_availability_zone	String	Definition Primary AZ ID. Range The value is the same as the primary AZ ID in the request.
vpc_id	String	Definition VPC ID, which is the same as the request parameter. Range The value is the same as the VPC ID in the request.
security_group_id	String	Definition Security group ID, which is the same as the request parameter. Range The value is the same as the security group ID in the request.
subnet_id	String	Definition Subnet ID, which is the same as the request parameter. Range The value is the same as the subnet ID in the request.
flavor_ref	String	Definition Specification code. Range The value is the same as the specification code in the request.
charge_info	MysqlChargeInfo object	Definition Billing mode, which is yearly/monthly or pay-per-use. By default, pay-per-use is used.
volume	MysqlVolumeResp object	Definition Volume information. This parameter is only returned for yearly/monthly instances.

Table 4-26 MysqlDatastore

Parameter	Type	Description
type	String	Definition DB engine. Range gaussdb-mysql
version	String	Definition DB version. Range N/A
kernel_version	String	Definition DB kernel version. Range N/A

Table 4-27 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Definition Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00 . Default Value N/A

Parameter	Type	Description
keep_days	String	Definition Retention period of automated backups. Constraints The value must be a positive integer. Range 1-732 Default Value N/A

Table 4-28 MysqlChargeInfo

Parameter	Type	Description
charge_mode	String	Definition Billing mode. Constraints N/A Range • prePaid: yearly/monthly • postPaid: pay-per-use Default Value postPaid
period_type	String	Definition Subscription period type in yearly/monthly mode. Constraints This parameter is only available and mandatory when charge_mode is set to prePaid . Range • month: The service is subscribed by month. • year: The service is subscribed by year. Default Value N/A

Parameter	Type	Description
period_num	Integer	Definition Subscription period in yearly/monthly mode. Constraints This parameter is only available and mandatory when charge_mode is set to prePaid . Range • When period_type is set to month, the parameter value ranges from 1 to 9. • When period_type is set to year, the parameter value ranges from 1 to 3. Default Value N/A
is_auto_renew	String	Definition 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 subscription renewal. Constraints This parameter is only available when charge_mode is set to prePaid . Range • true: Automatic renewal is enabled. • false: Automatic renewal is disabled. Default Value false
is_auto_pay	String	Definition Whether the order will be automatically paid after yearly/monthly instances are created. This parameter does not affect the payment method of automatic renewal. Constraints This parameter is only available when charge_mode is set to prePaid . Range • true: The order will be automatically paid. • false: The order will be manually paid. Default Value true

Table 4-29 MysqlVolumeResp

Parameter	Type	Description
size	Integer	Definition Disk size, in GB. Range The value is an integer multiple of 10 and ranges from 10 to 128000.

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

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

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

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

Example Request

NOTE

The value of **region** in the following is used as an example.

- Creating a DB instance billed at a pay-per-use basis (An automated backup is created during 08:00-09:00.)

POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances

```
{
  "name": "gaussdb-mysql-instance1",
  "region": "br-iaas-odin1",
  "charge_info": {
    "charge_mode": "postPaid"
  },
  "datastore": {
    "type": "gaussdb-mysql",
    "version": "8.0"
  },
  "mode": "Cluster",
  "flavor_ref": "gaussdb.mysql.xlarge.arm.4",
  "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",
  "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",
```



```
"security_group_id" : "fc577a1a-f202-424a-977f-24faec3fdd55",
"configuration_id" : "43570e0de32e40c5a15f831aa5ce4176pr07",
"password" : "*****",
"backup_strategy" : {
  "start_time" : "08:00-09:00"
},
"availability_zone_mode" : "single",
"slave_count" : 1,
"enterprise_project_id" : 0
}
```

- Restoring data to a new pay-per-use DB instance using backups

POST <https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances>

```
{
  "name" : "gaussdb-mysql-instance2",
  "region" : "br-iaas-odin1",
  "charge_info" : {
    "charge_mode" : "postPaid"
  },
  "datastore" : {
    "type" : "gaussdb-mysql",
    "version" : "8.0"
  },
  "mode" : "Cluster",
  "flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
  "vpc_id" : "3cedfc54-b105-4652-a4e0-847b11576b58",
  "subnet_id" : "c1cfa53c-65d3-431e-8552-326bf310c7ad",
  "security_group_id" : "fc577a1a-f202-424a-977f-24faec3fdd55",
  "configuration_id" : "43570e0de32e40c5a15f831aa5ce4176pr07",
  "password" : "*****",
  "backup_strategy" : {
    "start_time" : "08:00-09:00"
  },
  "availability_zone_mode" : "single",
  "slave_count" : 1,
  "enterprise_project_id" : 0,
  "restore_point" : {
    "source_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
    "backup_id" : "7ffbf305376b4cbea0ae491257b6aaf9br07",
    "type" : "backup"
  }
}
```

- Restoring data to a new pay-per-use instance through point-in-time recovery (PITR)

POST <https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances>

```
{
  "name" : "gaussdb-mysql-instance3",
  "region" : "br-iaas-odin1",
  "charge_info" : {
    "charge_mode" : "postPaid"
  },
  "datastore" : {
    "type" : "gaussdb-mysql",
    "version" : "8.0"
  },
  "mode" : "Cluster",
  "flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
  "vpc_id" : "3cedfc54-b105-4652-a4e0-847b11576b58",
  "subnet_id" : "c1cfa53c-65d3-431e-8552-326bf310c7ad",
  "security_group_id" : "fc577a1a-f202-424a-977f-24faec3fdd55",
  "configuration_id" : "43570e0de32e40c5a15f831aa5ce4176pr07",
  "password" : "xxxxx",
  "backup_strategy" : {
    "start_time" : "08:00-09:00"
  },
  "availability_zone_mode" : "single",
  "slave_count" : 1,
  "enterprise_project_id" : 0,
  "restore_point" : {

```

```
{
  "source_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
  "restore_time" : 1673852043000,
  "type" : "timestamp"
}
```

Example Response

Status code: 201

NOTE

The values of **region** and **master_availability_zone** are used as examples.

Success.

```
{
  "instance" : {
    "id" : "5eebbb4c0f9f4a99b42ed1b6334569aain07",
    "name" : "gaussdb-mysql-instance1",
    "status" : "BUILD",
    "region" : "br-iaas-odin1",
    "charge_info" : {
      "charge_mode" : "postPaid"
    },
  },
  "datastore" : {
    "type" : "gaussdb-mysql",
    "version" : "8.0"
  },
  "mode" : "Cluster",
  "port" : "3306",
  "enterprise_project_id" : 0,
  "flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
  "vpc_id" : "3cedfc54-b105-4652-a4e0-847b11576b58",
  "subnet_id" : "c1cfa53c-65d3-431e-8552-326bf310c7ad",
  "security_group_id" : "fc577a1a-f202-424a-977f-24faec3fdd55",
  "configuration_id" : "43570e0de32e40c5a15f831aa5ce4176pr07",
  "backup_strategy" : {
    "start_time" : "08:00-09:00",
    "keep_days" : 7
  },
  "availability_zone_mode" : "single"
},
"job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.3.2 Rebooting a DB Instance

Function

This API is used to reboot a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/restart

Table 4-32 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Instance ID, which is compliant with the UUID format.

Request Parameters

Table 4-33 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-34 Request body parameter

Parameter	Mandatory	Type	Description
delay	No	Boolean	Whether the instance will be rebooted with a delay. • true: The instance will be rebooted during the specified maintenance window. • false (default value): The instance will be rebooted immediately.

Response Parameters

Status code: 200

Table 4-35 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-36 Response body parameters

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

Status code: 500**Table 4-37** Response body parameters

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

Example Request

Rebooting a TaurusDB instance in the maintenance window

```
POST https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/restart
{
  "delay": true
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.3 Deleting/Unsubscribing from a DB Instance

Function

This API is used to delete a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}

Table 4-38 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-39 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-40 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Parameter	Type	Description
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly instances. Range N/A

Status code: 400

Table 4-41 Response body parameters

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

Status code: 500

Table 4-42 Response body parameters

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

Example Request

- Deleting a pay-per-use DB instance
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07
- Unsubscribing from a yearly/monthly DB instance
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07

Example Response

Status code: 200

Success.

- Pay-per-use DB instance
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
- Yearly/monthly DB instance
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890",


```
"order_id" : "CS2305230939BMXV8"
}
```

Status Code

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

Error Code

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

4.3.4 Creating a Read Replica

Function

This API is used to create a read replica. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/nodes/enlarge

Table 4-43 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-44 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-45 Request body parameters

Parameter	Mandatory	Type	Description
priorities	Yes	Array of integers	Definition Failover priority of a read replica. A smaller value indicates a higher priority. This priority determines the order in which read replicas are promoted when recovering from a primary node failure. Read replicas with the same priority have the same probability of being promoted to the new primary node. You can configure a failover priority for up to 9 read replicas, and the default priority for the remaining read replicas is -1, indicating these read replicas cannot be promoted to primary. You can change the failover priority of a read replica. Constraints N/A Range 1-16 Default Value N/A

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Definition Whether the order will be automatically paid. Constraints This parameter is only available for yearly/monthly instances. It does not affect the payment mode of automatic renewal. Range • true: The order will be automatically paid. • false: The order will be manually paid. Default Value true
availability_zones	No	Array of strings	Definition AZ. You can specify an AZ to create a read replica. If this parameter is not specified, an AZ is automatically assigned by default. Constraints The parameter is in the OBT phase. To use it, submit a service ticket. To obtain the value, see the key availability_zone in az_status of Querying Database Specifications . Note: Creating a read replica in a specified AZ may fail due to insufficient resources. Range To obtain the value, see the key availability_zone in az_status of Querying Database Specifications . Default Value N/A

Response Parameters

Status code: 201

Table 4-46 Response body parameters

Parameter	Type	Description
instance_id	String	Definition Instance ID, which uniquely identifies an instance. Range N/A
node_names	Array of strings	Definition Node names.
job_id	String	Definition ID of the task for creating a read replica. This parameter is only returned for pay-per-use read replicas. Range N/A
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly read replicas. Range N/A

Status code: 400**Table 4-47** Response body parameters

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

Status code: 500**Table 4-48** Response body parameters

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

Example Request

Creating a read replica for a DB instance

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/nodes/enlarge
{
  "priorities" : [ 1, 2 ]
}
```

Example Response

Status code: 201

Success.

```
{
  "instance_id" : "ba62a0b83a1b42bfab275829d86ac0fdin07",
  "node_names" : [ "gauss-ccf5_node03" ],
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.3.5 Deleting or Unsubscribing from a Read Replica

Function

This API is used to delete a read replica. For multi-AZ deployment, the primary node and remaining read replicas must be located in different AZs after read replicas are deleted. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/nodes/{node_id}

Table 4-49 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-50 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-51** Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Parameter	Type	Description
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly instances. Range N/A

Status code: 400

Table 4-52 Response body parameters

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

Status code: 500

Table 4-53 Response body parameters

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

Example Request

- Deleting a read replica of a pay-per-use DB instance
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/3d39c18788b54a919bab633874c159dfin01/nodes/096c0fc43e804757b59946b80dc27f8bin07
- Unsubscribing from a read replica of a yearly/monthly DB instance
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/3d39c18788b54a919bab633874c159dfin01/nodes/096c0fc43e804757b59946b80dc27f8bin07

Example Response

Status code: 200

Success.

- Pay-per-use DB instance
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
- Yearly/monthly DB instance
{
 "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890",

```
"order_id" : "CS2305230939BMXV8"
}
```

Status Code

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

Error Code

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

4.3.6 Scaling up Storage of a Yearly/Monthly DB Instance

Function

This API is used to scale up the storage of a yearly/monthly DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/volume/extend

Table 4-54 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-55 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-56 Request body parameters

Parameter	Mandatory	Type	Description
size	Yes	Integer	Definition Storage space after scale-up. Constraints The initial minimum storage of a yearly/monthly instance is 10 GB. The new storage must be a multiple of 10 and greater than the used storage. The maximum storage is 128,000 GB. Range The storage must be at least 20 GB during scale-up. The storage must be at least 10 GB during scale-down. Default Value N/A

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Definition Whether the order will be automatically paid. Constraints N/A Range • true: The order will be automatically paid. • false: The order will be manually paid. Default Value true

Response Parameters

Status code: 201

Table 4-57 Response body parameters

Parameter	Type	Description
size	Integer	Definition Storage space after scale-up. Range N/A
order_id	String	Definition Order ID. Range N/A

Status code: 400

Table 4-58 Response body parameters

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

Status code: 500

Table 4-59 Response body parameters

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

Example Request

Scaling up the storage of a yearly/monthly DB instance to 50 GB

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/volume/extend
{
  "size" : 50
}
```

Example Response

Status code: 201

Success.

```
{
  "size" : 50,
  "order_id" : "CS2001221129LVGUU"
}
```

Status Code

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

Error Code

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

4.3.7 Changing a DB Instance Name

Function

This API is used to change a DB instance name. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/name

Table 4-60 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-61 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-62 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Instance name. Constraints Instances of the same type can have the same name under the same tenant. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A
is_modify_node_name	No	String	Definition Whether to synchronously change the node name. Constraints N/A Range • true: The node name will be synchronously changed. • false: The node name will not be synchronously changed. Default Value true

Response Parameters

Status code: 200

Table 4-63 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for changing an instance name. Range N/A

Status code: 400**Table 4-64** Response body parameters

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

Status code: 500**Table 4-65** Response body parameters

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

Example Request

Changing the instance name to **gaussdb-name**

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/name
{
  "name" : "gaussdb-name"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "0f6b6a9e-bd39-4e95-9374-e4d134e5a3d1"
}
```

Status Code

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

Error Code

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

4.3.8 Resetting a Database Password

Function

This API is used to reset a database password. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/password

Table 4-66 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-67 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-68 Request body parameters

Parameter	Mandatory	Type	Description
password	Yes	String	Definition Database password. Constraints You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. If you enter a weak password, the system automatically determines that the password is invalid. Range The password can consist of 8 to 32 characters and must contain at least three types of the following: uppercase letters, lowercase letters, digits, and special characters .~!@#\$\$%^*_-=+?,()& Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-69 Response body parameters

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

Status code: 500

Table 4-70 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Resetting a database password

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/password
{
  "password" : "Test_345612"
}
```

Example Response

None

Status Code

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

Error Code

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

4.3.9 Changing DB Instance Specifications

Function

This API is used to change DB instance specifications. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/action

Table 4-71 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-72 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-73 Request body parameters

Parameter	Mandatory	Type	Description
resize_flavor	Yes	MysqlResizeFlavor object	Definition Specification change information. Constraints N/A

Parameter	Mandatory	Type	Description
is_auto_pay	No	String	Definition Whether the order will be automatically paid when the specifications of yearly/monthly instances are changed. Constraints N/A Range • true (default value): The order will be automatically paid from your account. • false: The order will be manually paid. Default Value N/A

Table 4-74 MysqlResizeFlavor

Parameter	Mandatory	Type	Description
spec_code	Yes	String	Definition Specification code. For details, see spec_code in Table 5 in Querying Database Specifications . Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-75 Response body parameters

Parameter	Type	Description
job_id	String	Definition ID of the task of changing instance specifications. This parameter is returned only for pay-per-use instances. Range N/A
order_id	String	Definition Order ID. This parameter is returned only for yearly/monthly instances. Range N/A

Status code: 400**Table 4-76** Response body parameters

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

Status code: 500**Table 4-77** Response body parameters

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

Example Request

Changing the specifications of a DB instance to 4 vCPUs and 32 GB memory

```
{
  "resize_flavor": {
    "spec_code": "gaussdb.mysql.xlarge.arm.8"
  }
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

Status Code

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

Error Code

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

4.3.10 Querying Dedicated Resource Pools

Function

This API is used to obtain information about all dedicated resource pools you created. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/dedicated-resources

Table 4-78 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-79 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-80 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-81 Response body parameters

Parameter	Type	Description
resources	Array of DedicatedResource objects	Definition Dedicated resource pool information.

Parameter	Type	Description
total_count	Integer	Definition Number of dedicated resource pools. Range N/A

Table 4-82 DedicatedResource

Parameter	Type	Description
id	String	Definition ID of the dedicated resource pool. Range N/A
resource_name	String	Definition Name of the dedicated resource pool. Range N/A
engine_name	String	Definition DB engine. Range N/A
architecture	String	Definition CPU architecture. Range N/A
status	String	Definition Status of the dedicated resource pool. Range ● NORMAL: The dedicated resource pool is normal. ● BUILDING: The dedicated resource pool is being built. ● EXTENDING: The dedicated resource pool is being scaled out. ● DELETED: The dedicated resource pool has been deleted.
capacity	DedicatedResourceCapacity object	Definition Capacity of the dedicated resource pool.

Parameter	Type	Description
availability_zone	Array of strings	Definition AZ where the dedicated resource pool is deployed. Range N/A

Table 4-83 DedicatedResourceCapacity

Parameter	Type	Description
ram	Integer	Definition Memory size, in GB. Range N/A
volume	Long	Definition Storage space, in GB. Range N/A
vcpus	Integer	Definition Number of vCPUs. Range N/A

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

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

Status code: 500**Table 4-85** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying dedicated resource pools

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/dedicated-resources
```

Example Response

Status code: 200

Success.

```
{
  "resources": [ {
    "id": "1d07f7ba-f140-46a7-b002-58ba22ee6ff3",
    "resource_name": "testdcc",
    "engine_name": "gaussdb-mysql",
    "architecture": "ARM",
    "status": "NORMAL",
    "capacity": {
      "ram": 256,
      "volume": 10000000,
      "vcpus": 64
    },
    "availability_zone": [ "az1xahz" ]
  } ]
}
```

Status Code

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

Error Code

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

4.3.11 Querying Dedicated Resources

Function

This API is used to query dedicated resources. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
GET /v3/{project_id}/dedicated-resource/{dedicated_resource_id}
```


Table 4-86 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
dedicated_resource_id	Yes	String	Definition ID of the dedicated resource pool. To obtain this value, see Querying Dedicated Resource Pools . Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-87 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-88 Response body parameters

Parameter	Type	Description
id	String	Definition ID of the dedicated resource pool. Range N/A

Parameter	Type	Description
resource_name	String	Definition Name of the dedicated resource pool. Range N/A
engine_name	String	Definition DB engine name. Range N/A
availability_zone_ids	Array of strings	Definition AZs.
architecture	String	Definition CPU architecture. Range N/A
status	String	Definition Status of the dedicated resource pool. Range N/A
dedicated_compute_info	DedicatedComputeInfo object	Definition Compute resource information.
dedicated_storage_info	DedicatedStorageInfo object	Definition Storage resource information.

Table 4-89 DedicatedComputeInfo

Parameter	Type	Description
vcpus_total	Integer	Definition Total vCPUs in the dedicated resource pool. Range N/A
vcpus_used	Integer	Definition Used vCPUs in the dedicated resource pool. Range N/A

Parameter	Type	Description
ram_total	Integer	Definition Total memory size of the dedicated resource pool, in GB. Range N/A
ram_used	Integer	Definition Used memory size of the dedicated resource pool, in GB. Range N/A
spec_code	String	Definition Compute resource specification code of the dedicated resource pool. Range N/A
host_num	Integer	Definition Number of compute hosts in the dedicated resource pool. Range N/A

Table 4-90 DedicatedStorageInfo

Parameter	Type	Description
spec_code	String	Definition Storage resource specification code of the dedicated resource pool. Range N/A
host_num	Integer	Definition Number of storage hosts in the dedicated resource pool. Range N/A

Status code: 400

Table 4-91 Response body parameters

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

Status code: 500**Table 4-92** Response body parameters

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

Example Request

Querying dedicated resources

```
GET https://{endpoint}/v3/058497e1c100d3eb2f3cc01160616934/dedicated-resource/6e097c33-d6b9-4ca5-83cb-6cc79dcf4f06
```

Example Response

Status code: 200

Success.

```
{
  "id": "e097c33-d6b9-4ca5-83cb-6cc79dcf4f06",
  "resource_name": "test_dcc",
  "engine_name": "taurus",
  "availability_zone_ids": [ "az1xahz", "az2xahz" ],
  "architecture": "ARM",
  "status": "normal",
  "dedicated_compute_info": {
    "vcpu_total": 128,
    "vcpu_used": 64,
    "ram_total": 512,
    "ram_used": 256,
    "spec_code": "gaussdb.mysql.c6.host",
    "host_num": 1
  },
  "dedicated_storage_info": {
    "spec_code": "gaussdb.mysql.dfvpool.30tb.host",
    "host_num": 1
  }
}
```

Status Code

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

Error Code

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

4.3.12 Configuring Monitoring by Seconds

Function

This API is used to configure Monitoring by Seconds for instances. You can set the monitoring interval to 1 second or 5 seconds to view the metric values. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/monitor-policy

Table 4-93 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-94 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-95 Request body parameters

Parameter	Mandatory	Type	Description
monitor_switch	Yes	Boolean	Definition Whether to enable Monitoring by Seconds. Constraints N/A Range • true: enabled • false: disabled Default Value N/A
period	No	Integer	Definition Collection period. Constraints This parameter is only available when monitor_switch is set to true . This parameter is not displayed when monitor_switch is set to false . Range • 1: The collection period is 1s. • 5: The collection period is 5s. Default Value 5

Response Parameters

Status code: 200

Table 4-96 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying Monitoring by Seconds. Range N/A

Status code: 400

Table 4-97 Response body parameters

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

Status code: 500

Table 4-98 Response body parameters

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

Example Request

Enabling Monitoring by Seconds and changing its collection period to 1s

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
61a4ea66210545909d74a05c27a7179ein07/monitor-policy  
{  
  "monitor_switch": true,  
  "period": 1  
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "6b7dd5d4-4590-4f14-b164-a8737ce071d5"  
}
```

Status Code

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

Error Code

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

4.3.13 Querying the Configuration of Monitoring by Seconds

Function

This API is used to query the configuration of Monitoring by Seconds. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/monitor-policy

Table 4-99 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-100 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-101 Response body parameters

Parameter	Type	Description
monitor_switch	Boolean	Definition Whether to enable Monitoring by Seconds. Range • true: enabled • false: disabled
period	Integer	Definition Collection period. This parameter is only returned when monitor_switch is set to true . Range • 1: The collection period is 1s. • 5: The collection period is 5s.

Status code: 400

Table 4-102 Response body parameters

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

Status code: 500

Table 4-103 Response body parameters

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

Example Request

Querying the status of Monitoring by Seconds for a DB instance

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
61a4ea66210545909d74a05c27a7179ein07/monitor-policy
```

Example Response

Status code: 200

Success.

```
{  
  "monitor_switch" : true,  
  "period" : "1"  
}
```

Status Code

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

Error Code

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

4.3.14 Rebooting a Node

Function

This API is used to reboot a node. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/restart

Table 4-104 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-105 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-106 Request body parameters

Parameter	Mandatory	Type	Description
delay	No	Boolean	Definition Whether the instance node will be rebooted with a delay. Constraints N/A Range • true: The node will be rebooted in the specified maintenance window. • false: The node will be rebooted immediately. Default Value false

Response Parameters

Status code: 200

Table 4-107 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-108 Response body parameters

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

Status code: 500

Table 4-109 Response body parameters

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

Example Request

Rebooting a node of a DB instance

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/af315b8e6aaa41799bd9a31f2de15abcin07/nodes/f0d5f01f04964f36a545ad85e4e9cfe9no07/restart
{
  "delay": false
}
```

Example Response

Success.

```
{
  "job_id" : "6b7dd5d4-4590-4f14-b164-a8737ce071d5"
}
```

Status Code

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

Error Code

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

4.3.15 Upgrading the Kernel Version of a DB Instance

Function

This API is used to upgrade the kernel version of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/db-upgrade

Table 4-110 URI 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 is compliant with the UUID format.

Request Parameters

Table 4-111 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-112 Request body parameter

Parameter	Mandatory	Type	Description
delay	No	Boolean	Whether the instance will be upgraded with a delay. • true: The instance will be upgraded during the specified maintenance window. • false (default value): The instance will be upgraded immediately.

Response Parameters

Status code: 200

Table 4-113 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-114 Response body parameters

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

Status code: 500

Table 4-115 Response body parameters

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

Example Request

Upgrading the minor version of a DB instance immediately

```
POST https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/db-upgrade
{
  "delay" : false
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.16 Enabling or Disabling SSL

Function

This API is used to enable or disable SSL. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/ssl-option

Table 4-116 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-117 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-118 Request body parameter

Parameter	Mandatory	Type	Description
ssl_option	Yes	Boolean	Definition Whether to enable SSL. Constraints N/A Range • true: SSL is enabled. • false: SSL is disabled. Default Value N/A

Response Parameters

Status code: 200

Table 4-119 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-120 Response body parameters

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

Status code: 500

Table 4-121 Response body parameters

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

Example Request

Enabling SSL for a DB instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/ssl-option
{
  "ssl_option": true
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "e0fbafc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.17 Binding an EIP

Function

This API is used to bind an EIP to a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/public-ips/bind

Table 4-122 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-123 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-124 Request body parameters

Parameter	Mandatory	Type	Description
public_ip	Yes	String	Definition EIP to be bound. Constraints The value must comply with the IP address rule. Range N/A Default Value N/A
public_ip_id	Yes	String	Definition EIP ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-125 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400**Table 4-126** Response body parameters

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

Status code: 500**Table 4-127** Response body parameters

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

Example Request

Binding an EIP to a DB instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/public-ips/bind
{
  "public_ip" : "10.145.51.214",
  "public_ip_id" : "8403e9cd-a7fa-4288-8b15-c7ceac1etest"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.18 Unbinding an EIP

Function

This API is used to unbind an EIP from a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/public-ips/unbind

Table 4-128 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Instance ID, which is compliant with the UUID format.

Request Parameters

Table 4-129 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-130** Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-131 Response body parameters

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

Status code: 500**Table 4-132** Response body parameters

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

Example Request

Unbinding an EIP from a DB instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/public-ips/unbind
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.19 Promoting a Read Replica to Primary

Function

This API is used to promote a read replica to the primary node. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/switchover

Table 4-133 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-134 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-135 Request body parameter

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition ID of the read replica that will be promoted to the primary. Constraints N/A Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed. Default Value N/A

Response Parameters

Status code: 200

Table 4-136 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-137 Response body parameters

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

Status code: 500

Table 4-138 Response body parameters

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

Example Request

Promoting a read replica to primary

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/switchover
{
  "node_id" : "1801a615b52b4a5697cfe385f6affbf4no07"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.20 Changing a Maintenance Window

Function

This API is used to change a maintenance window. To prevent service interruption, set the maintenance window to off-peak hours. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/ops-window

Table 4-139 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-140 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-141 Request body parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Start time for a maintenance window (UTC time). Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
end_time	Yes	String	Definition End time for a maintenance window (UTC time). Constraints The start time and end time of a maintenance window must be on the hour, and the interval between them must be one to four hours. Range N/A Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-142 Response body parameters

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

Status code: 500

Table 4-143 Response body parameters

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

Example Request

Changing the maintenance window of a DB instance to 22:00-02:00

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/ops-window
```

```
{
  "start_time" : "22:00",
  "end_time" : "02:00"
}
```

Example Response

Status code: 200

Success.

```
{ }
```

Status Code

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

Error Code

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

4.3.21 Changing a Security Group

Function

This API is used to change the security group of a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/security-group

Table 4-144 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-145 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-146 Request body parameter

Parameter	Mandatory	Type	Description
security_group_id	Yes	String	Definition Security group ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-147 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-148 Response body parameters

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

Status code: 500**Table 4-149** Response body parameters

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

Example Request

Changing the security group of a DB instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/security-group
{
  "security_group_id" : "054f55b5-946e-4761-a1e3-3be6892827c1"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.22 Changing a Private IP Address

Function

This API is used to change the private IP address of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/internal-ip

Table 4-150 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-151 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-152 Request body parameter

Parameter	Mandatory	Type	Description
internal_ip	Yes	String	Definition Private IP address. Constraints The value must be an available IP address within the current instance's subnet. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-153 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-154 Response body parameters

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

Status code: 500

Table 4-155 Response body parameters

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

Example Request

Changing the private IP address of a DB instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/internal-ip
{
  "internal_ip" : "192.*.*"
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "e0fbffc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

Status Code

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

Error Code

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

4.3.23 Changing a Database Port

Function

This API is used to change the database port of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/port

Table 4-156 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-157 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-158 Request body parameter

Parameter	Mandatory	Type	Description
port	Yes	Integer	Definition Port number. Constraints N/A Range 1024 to 65535, excluding 5342 to 5345, 12017, 20000, 20201, 20202, 33062, and 33071 Default Value N/A

Response Parameters

Status code: 200

Table 4-159 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-160 Response body parameters

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

Status code: 500**Table 4-161** Response body parameters

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

Example Request

Changing the database port to 8836

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/port
{
  "port" : 8836
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbffc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.3.24 Modifying the Description of a DB Instance

Function

This API is used to modify the description of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/alias

Table 4-162 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-163 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-164 Request body parameter

Parameter	Mandatory	Type	Description
alias	Yes	String	Definition Instance description. Constraints N/A Range The value can contain 0 to 64 characters. Only letters, digits, periods (.), underscores (_), hyphens (-), and spaces are supported. The value cannot start or end with a space. Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-165 Response body parameters

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

Status code: 500

Table 4-166 Response body parameters

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

Example Request

Modifying the description of a DB instance to **Test_alias**

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/  
096c0fc43e804757b59946b80dc27f8bin07/alias  
{  
  "alias" : "Test_alias"  
}
```

Example Response

Status code: 200

Success.

```
{ }
```

Status Code

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

Error Code

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

4.3.25 Applying for a Private Domain Name

Function

This API is used to apply for a private domain name. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

POST /v3/{project_id}/instances/{instance_id}/dns

Table 4-167 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-168 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-169 Request body parameter

Parameter	Mandatory	Type	Description
dns_type	Yes	String	Definition Domain name type. Constraints N/A Range Private Default Value N/A

Response Parameters

Status code: 200

Table 4-170 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-171 Response body parameters

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

Status code: 500

Table 4-172 Response body parameters

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

Example Request

Applying for a private domain name

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/af315b8e6aaa41799bd9a31f2de15abcin07/dns
{
  "dns_type" : "private"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "d5169969-e391-482a-9755-042b2d83ed17"
}
```

Status Code

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

Error Code

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

4.3.26 Changing a Private Domain Name

Function

This API is used to change a private domain name. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/dns

Table 4-173 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-174 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-175 Request body parameter

Parameter	Mandatory	Type	Description
dns_name	Yes	String	Definition Prefix of the new domain name. Constraints N/A Range The value can contain 8 to 63 characters. Only lowercase letters and digits are allowed. Default Value N/A

Response Parameters

Status code: 200

Table 4-176 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-177 Response body parameters

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

Status code: 500**Table 4-178** Response body parameters

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

Example Request

Changing a private domain name

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/af315b8e6aaa41799bd9a31f2de15abcin07/dns
{
  "dns_name": "testmodifydnsname"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "d5169969-e391-482a-9755-042b2d83ed17"
}
```

Status Code

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

Error Code

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

4.3.27 Querying the Kernel Version

Function

This API is used to query the kernel version of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/database-version

Table 4-179 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-180 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-181** Response body parameters

Parameter	Type	Description
datastore	InstanceData baseVersionInfo object	Definition DB version information.

Parameter	Type	Description
upgrade_flag	Boolean	Definition Whether the version can be upgraded. Range • true: The version can be upgraded. • false: The version cannot be upgraded.

Table 4-182 InstanceDatabaseVersionInfo

Parameter	Type	Description
current_version	String	Definition Current database version. Range N/A
current_kernel_version	String	Definition Current database kernel version. Range N/A
latest_version	String	Definition Latest database version. Range N/A
latest_kernel_version	String	Definition Latest database kernel version. Range N/A

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

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

Status code: 500

Table 4-184 Response body parameters

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

Example Request

Querying the kernel version of a DB instance

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/61a4ea66210545909d74a05c27a7179ein07/database-version
```

Example Response

Status code: 200

Success.

```
{
  "datastore": {
    "current_version": "8.0.22",
    "current_kernel_version": "2.0.28.15",
    "latest_version": "8.0.22",
    "latest_kernel_version": "2.0.42.230600"
  },
  "upgrade_flag": true
}
```

Status Code

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

Error Code

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

4.3.28 Configuring an Auto Scaling Policy

Function

This API is used to configure an auto scaling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

PUT /v3/{project_id}/instances/{instance_id}/auto-scaling/policy

Table 4-185 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-186 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-187 Request body parameters

Parameter	Mandatory	Type	Description
status	Yes	String	Definition Whether auto scaling is enabled. Constraints N/A Range • ON: Auto scaling is enabled. • OFF: Auto scaling is disabled. Default Value N/A
scaling_strategy	Yes	ScalingStrategyReqInfo object	Definition Configuration of an auto scaling policy. Constraints N/A
monitor_cycle	No	Integer	Definition Observation period, in seconds. During the entire observation period, if the average CPU usage is greater than or equal to the preset value, a scale-up is triggered. Constraints This parameter is mandatory when status is set to ON . Range 300, 600, 900, 1800 Default Value N/A

Parameter	Mandatory	Type	Description
silence_cycle	No	Integer	Definition Silent period, in seconds. It indicates the minimum interval between two auto scale-up operations or two auto scale-down operations. Constraints This parameter is mandatory when status is set to ON . Range 300, 600, 1800, 3600, 7200, 10800, 86400, 604800 Default Value N/A
enlarge_thres hold	No	Integer	Definition Average CPU usage (%). Constraints This parameter is mandatory when status is set to ON . Range 50–100 Default Value N/A
max_flavor	No	String	Definition Maximum specifications. Constraints This parameter is mandatory when the instance specifications are automatically scaled up or down. The vCPU/memory ratio of the new specifications must be the same as that of the original specifications. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
reduce_enabled	No	Boolean	Definition Whether to enable auto scale-down. Constraints This parameter is mandatory when auto scaling is enabled. Range • true: Auto scale-down is enabled. • false: Auto scale-down is disabled. Default Value N/A
max_read_only_count	No	Integer	Definition Maximum number of read replicas. Constraints This parameter is mandatory when read replicas are automatically added or deleted. Range 2–15 Default Value N/A
read_only_weight	No	Integer	Definition Read weight of read replicas. Constraints This parameter is mandatory when read replicas are automatically added or deleted. Range N/A Default Value 0–1000

Table 4-188 ScalingStrategyReqInfo

Parameter	Mandatory	Type	Description
flavor_switch	Yes	String	Definition Whether instance specifications can be automatically scaled up or down. Constraints N/A Range • ON: Instance specifications can be automatically scaled up or down. • OFF: Instance specifications cannot be automatically scaled up or down. Default Value N/A
read_only_switch	Yes	String	Definition Whether read replicas can be automatically added or deleted. Constraints To use this function, ensure that there is only one proxy instance. For details about how to create a proxy instance, see Creating a Proxy Instance . Range • ON: Read replicas can be automatically added or deleted. • OFF: Read replicas cannot be automatically added or deleted. Default Value N/A

Response Parameters

Status code: 200

Table 4-189 Response body parameters

Parameter	Type	Description
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
switch_status	AutoScalingSwitchStatus object	Definition Switch status.

Table 4-190 AutoScalingSwitchStatus

Parameter	Type	Description
scaling_switch	String	Definition Whether auto scaling is enabled. Range ● ON: Auto scaling is enabled. ● OFF: Auto scaling is disabled.
flavor_switch	String	Definition Whether instance specifications are automatically scaled up or down. Range ● ON: Instance specifications are automatically scaled up or down. ● OFF: Instance specifications are not automatically scaled up or down.

Parameter	Type	Description
read_only_switch	String	Definition Whether read replicas are automatically added or deleted. Range • ON: Read replicas are automatically added or deleted. • OFF: Read replicas are not automatically added or deleted.

Status code: 400

Table 4-191 Response body parameters

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

Status code: 500

Table 4-192 Response body parameters

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

Example Request

Configuring an auto scaling policy

```
PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/auto-scaling/policy
```

```
{  
  "enlarge_threshold" : 50,  
  "max_flavor" : "gaussdb.mysql.large.x86.4",  
  "max_read_only_count" : 2,  
  "monitor_cycle" : 300,  
  "read_only_weight" : 10,  
  "reduce_enabled" : false,  
  "scaling_strategy" : {  
    "flavor_switch" : "ON",  
    "read_only_switch" : "ON"  
  },  
  "silence_cycle" : 300,  
}
```

```
"status" : "ON"
}
```

Example Response

Status code: 200

Success.

```
{
  "instance_id" : "61a4ea66210545909d74a05c27a7179ein07",
  "instance_name" : "gauss-test-1",
  "switch_status" : {
    "scaling_switch" : "ON",
    "flavor_switch" : "ON",
    "read_only_switch" : "ON"
  }
}
```

Status Code

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

Error Code

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

4.3.29 Querying an Auto Scaling Policy

Function

This API is used to query an auto scaling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/auto-scaling/policy

Table 4-193 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-194 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-195 Response body parameters

Parameter	Type	Description
id	String	Definition ID of an auto scaling policy. Range N/A
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
status	String	Definition Whether auto scaling is enabled. Range ● ON: enabled ● OFF: disabled
monitor_cycle	Integer	Definition Observation period, in seconds. During the entire observation period, if the average CPU usage is greater than or equal to the preset value, a scale-up is triggered. Range ● 300 ● 600 ● 900 ● 1800

Parameter	Type	Description
silence_cycle	Integer	Definition Silent period, in seconds. It indicates the minimum interval between two auto scale-up operations or two auto scale-down operations. Range • 300 • 600 • 1800 • 3600 • 7200 • 10800 • 86400 • 604800
enlarge_thres hold	Integer	Definition Average CPU usage. Range 50-100
max_flavor	String	Definition Maximum specifications. Range Maximum specifications that can be changed for an instance at the current site.
reduce_enabled	Boolean	Definition Whether auto scale-down is enabled. Range • true: enabled • false: disabled
min_flavor	String	Definition Minimum specifications. Range Minimum specifications that can be changed for an instance at the current site.

Parameter	Type	Description
silence_start_at	String	Definition Start time of the silent period (end time of the last change). The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . Range N/A
scaling_strategy	ScalingStrategyInfo object	Definition Auto scaling policy.
max_read_only_count	Integer	Definition Maximum number of read replicas. Range $2 \leq \text{Number of current read replicas} < \text{Preset value} \leq 15$
min_read_only_count	Integer	Definition Minimum number of read replicas. Range 1–14
read_only_weight	Integer	Definition Read weights of read replicas. Range 0–1000

Table 4-196 ScalingStrategyInfo

Parameter	Type	Description
flavor_switch	String	Definition Whether instance specifications can be automatically scaled up or down. Range ● ON: Yes ● OFF: No

Parameter	Type	Description
read_only_switch	String	Definition Whether read replicas can be automatically added or deleted. Range • ON: Yes • OFF: No

Status code: 400**Table 4-197** Response body parameters

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

Status code: 500**Table 4-198** Response body parameters

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

Example Request

Querying an auto scaling policy

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/auto-scaling/policy
```

Example Response

Status code: 200

Success.

- Performing a query after auto scaling is enabled

```
{  
  "id" : "26d8e193-1ea0-4adb-89d0-d1343399d0e7",  
  "instance_id" : "41ff7519e22d44eea6066615fa5b17c7in07",  
  "instance_name" : "gauss-test-1",  
  "status" : "ON",  
  "monitor_cycle" : 300,  
  "silence_cycle" : 300,
```

```
"enlarge_threshold" : 50,
"max_flavor" : "gaussdb.mysql.large.x86.4",
"reduce_enabled" : false,
"min_flavor" : "gaussdb.mysql.medium.x86.4",
"silence_start_at" : "2023-08-31T08:59:09+0000",
"scaling_strategy" : {
  "flavor_switch" : "ON",
  "read_only_switch" : "ON"
},
"max_read_only_count" : 2,
"min_read_only_count" : 1,
"read_only_weight" : 10
}
```

- Performing a query after auto scaling is disabled

```
{
  "id" : null,
  "instance_id" : "41ff7519e22d44eea6066615fa5b17c7in07",
  "instance_name" : "gauss-test-1",
  "status" : "OFF",
  "monitor_cycle" : null,
  "silence_cycle" : null,
  "enlarge_threshold" : null,
  "max_flavor" : null,
  "reduce_enabled" : null,
  "min_flavor" : null,
  "silence_start_at" : "",
  "scaling_strategy" : {
    "flavor_switch" : "",
    "read_only_switch" : ""
  },
  "max_read_only_count" : null,
  "min_read_only_count" : null,
  "read_only_weight" : null
}
```

Status Code

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

Error Code

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

4.3.30 Pre-Checking Resources

Function

This API is used to pre-check resources. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/resource-check

Table 4-199 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-200 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-201 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Definition Check type. Constraints N/A Range • createInstance: pre-checking resources during instance creation • createReadonlyNode: pre-checking resources during read replica creation • resizeFlavor: pre-checking resources during instance specification change Default Value N/A

Parameter	Mandatory	Type	Description
resource	Yes	CheckResourceInfo object	Definition Resource information. Constraints N/A

Table 4-202 CheckResourceInfo

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Definition Enterprise project ID. Constraints This parameter is mandatory when action is set to createInstance . Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_num	No	Integer	Definition Number of instances. Constraints This parameter is mandatory when action is set to createInstance . Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
mode	No	String	Definition Instance type. Constraints This parameter is mandatory when action is set to createInstance . Range Cluster Default Value N/A
availability_zone_mode	No	String	Definition AZ type. Constraints This parameter is mandatory when action is set to createInstance . Range • single: single AZ • multi: multiple AZs Default Value N/A
node_num	No	Integer	Definition Number of nodes. Constraints This parameter is mandatory when action is set to createInstance or createReadOnlyNode . Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
flavor_ref	No	String	Definition Specification code. Constraints This parameter is mandatory when action is set to createInstance or resizeFlavor . Range N/A Default Value N/A
availability_zone	No	String	Definition AZ code. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
subnet_id	No	String	Definition Subnet ID. Subnet ID. You can obtain the value with either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: Query the subnet ID through the VPC API. For details, see Querying Subnets. Constraints This parameter is mandatory when action is set to createInstance . Range N/A Default Value N/A
instance_id	No	String	Definition Instance ID. Constraints This parameter is mandatory when action is set to createReadonlyNode or resizeFlavor . Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Response Parameters

Status code: 200

Table 4-203 Response body parameter

Parameter	Type	Description
result	Boolean	Definition Pre-check results. Range • true: The pre-check is passed. • false: The pre-check fails.

Status code: 400**Table 4-204** Response body parameters

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

Status code: 500**Table 4-205** Response body parameters

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

Example Request

- Pre-checking resources during instance creation
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/resource-check

```
{
  "action": "createInstance",
  "resource": {
    "enterprise_project_id": 0,
    "instance_num": 1,
    "mode": "Cluster",
    "availability_zone_mode": "single",
    "node_num": 2,
    "flavor_ref": "gaussdb.mysql.xlarge.x86.4",
    "availability_zone": "cn-southwest-244b",
    "subnet_id": "1e9f71dd-9192-4c0d-9739-161d8dcca68c"
  }
}
```
- Pre-checking resources during read replica creation
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/resource-check

```
{
```

```
"action" : "createReadOnlyNode",
"resource" : {
  "instance_id" : "376e0847a2224e95afcd3e607eccd544in07",
  "node_num" : 1
}
```

- Pre-checking resources during instance specification change
POST <https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/resource-check>

```
{
  "action" : "resizeFlavor",
  "resource" : {
    "instance_id" : "376e0847a2224e95afcd3e607eccd544in07",
    "flavor_ref" : "gaussdb.mysql.xlarge.x86.4"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "result" : true
}
```

Status Code

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

Error Code

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

4.3.31 Querying DB Instances

Function

This API is used to query DB instances based on specified criteria. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET [/v3.1/{project_id}/instances](#)

Table 4-206 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-207 Query parameters

Parameter	Mandatory	Type	Description
id	No	String	Definition Instance ID. Constraints The asterisk (*) is reserved for the system. If the instance ID starts with *, it indicates that fuzzy match is performed based on the value following *. Otherwise, exact match is performed based on the instance ID. The value cannot contain only asterisks (*). Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
name	No	String	Definition Instance name. Constraints The asterisk (*) is reserved for the system. If the instance name starts with *, it indicates that fuzzy match is performed based on the value following *. Otherwise, exact match is performed based on the instance name. The value cannot contain only asterisks (*). Range N/A Default Value N/A
type	No	String	Definition Instance type. Constraints Currently, only the cluster type is supported. Range Cluster Default Value Cluster
datastore_type	No	String	Definition Database type. Constraints Only gaussdb-mysql is supported. Range gaussdb-mysql Default Value gaussdb-mysql

Parameter	Mandatory	Type	Description
vpc_id	No	String	Definition VPC ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and view the VPC ID on the VPC details page. • Method 2: Query the VPC ID through the VPC API. For details, see Querying VPCs. Constraints N/A Range N/A Default Value N/A
subnet_id	No	String	Definition Subnet ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: Query the subnet ID through the VPC API. For details, see Querying Subnets. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
private_ip	No	String	Definition Private IP address. Constraints N/A Range N/A Default Value N/A
readonly_private_ip	No	String	Definition Private IP address for read. Constraints N/A Range N/A Default Value N/A
proxy_ip	No	String	Definition Proxy IP address. Constraints N/A Range N/A Default Value N/A
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1-100 Default Value 100
tags	No	String	Definition Tag key-value pairs of the instance. • {key} indicates the tag key. • {value} indicates the tag value. Constraints To query instances with multiple tag keys and values, separate key-value pairs with commas (,). The key must be unique. Multiple keys are in AND relationship. Range N/A Default Value N/A

Request Parameters

Table 4-208 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-209** Response body parameters

Parameter	Type	Description
instances	Array of MysqlInstanceListInfoUnifyStatus objects	Definition Instance list.

Parameter	Type	Description
total_count	Integer	Definition Total number of records. Range N/A

Table 4-210 MysqlInstanceListInfoUnifyStatus

Parameter	Type	Description
id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range N/A
status	String	Definition Instance status. Range • creating: An instance is being created. • normal: An instance is available. • abnormal: An instance is abnormal. • createfail: An instance failed to be created.
private_ips	Array of strings	Definition Private IP addresses for write of instances. This parameter is left blank until an ECS is created. Range N/A
proxy_ips	Array of strings	Definition Proxy IP addresses. This parameter is left blank until proxy instances are created for a DB instance. Range N/A

Parameter	Type	Description
readonly_private_ips	Array of strings	Definition Private IP addresses for read of instances. This parameter is left blank until an ECS is created. Range N/A
public_ips	Array of strings	Definition Public IP addresses. Range N/A
port	String	Definition Database port. Range 1024 to 65535, excluding 5342 to 5345, 12017, 20000, 20201, 20202, 33062, and 33071
type	String	Definition Instance type. Range Cluster
region	String	Definition Region where an instance is deployed. Range N/A
datastore	MysqlDatastoreWithKernelVersion object	Definition Database information.
created	String	Definition Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Parameter	Type	Description
updated	String	Definition Update time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
db_user_name	String	Definition Default username. Range N/A
vpc_id	String	Definition VPC ID. Range N/A
subnet_id	String	Definition Subnet ID. Range N/A
security_group_id	String	Definition Security group ID. Range N/A
flavor_ref	String	Definition Specification code. Range N/A
flavor_info	MysqlFlavorInfo object	Definition Flavor information. Range N/A
volume	MysqlVolumeInfo object	Definition Storage disk information.

Parameter	Type	Description
backup_strategy	MysqlBackupStrategy object	Definition Automated backup policy. Constraints N/A
enterprise_project_id	String	Definition Enterprise project ID. Range N/A
time_zone	String	Definition Time zone. Range N/A
charge_info	MysqlChargeInfo object	Definition Billing mode, which is yearly/monthly or pay-per-use (default setting).
dedicated_resource_id	String	Definition Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool. Range N/A
tags	Array of InstanceTagItem objects	Definition Tag list.

Table 4-211 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	Definition DB engine. Range gaussdb-mysql
version	String	Definition DB version. Range N/A

Parameter	Type	Description
kernel_version	String	Definition DB kernel version. Range N/A

Table 4-212 MysqlFlavorInfo

Parameter	Type	Description
vcpus	String	Definition Number of vCPUs. Range N/A
ram	String	Definition Memory size, in GB. Range N/A

Table 4-213 MysqlVolumeInfo

Parameter	Type	Description
type	String	Definition Disk type. Range N/A
size	String	Definition Used disk size, in GB. Range N/A

Table 4-214 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Definition Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00. Default Value N/A
keep_days	String	Definition Retention days of automated backups. Constraints The value must be a positive integer. Range 1-732 Default Value N/A

Table 4-215 MysqlChargeInfo

Parameter	Type	Description
charge_mode	String	Definition Billing mode. Constraints N/A Range • prePaid: yearly/monthly • postPaid: pay-per-use Default Value postPaid

Parameter	Type	Description
period_type	String	Definition Subscription period type in yearly/monthly mode. Constraints This parameter is only valid and mandatory when charge_mode is set to prePaid . Range • month: The service is subscribed by month. • year: The service is subscribed by year. Default Value N/A
period_num	Integer	Definition Subscription period in yearly/monthly mode. Constraints This parameter is only valid and mandatory when charge_mode is set to prePaid . Range • When period_type is set to month, the value range is 1 to 9. • When period_type is set to year, the value range is 1 to 3. Default Value N/A
is_auto_renew	String	Definition 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 subscription renewal. Constraints This parameter is only valid when charge_mode is set to prePaid . Range • true: Automatic renewal is enabled. • false: Automatic renewal is disabled. Default Value false

Parameter	Type	Description
is_auto_pay	String	Definition Whether the order will be automatically paid after yearly/monthly instances are created. This parameter does not affect the payment method of automatic renewal. Constraints This parameter is only valid when charge_mode is set to prePaid . Range • true: The order will be automatically paid. • false: The order will be manually paid. Default Value true

Table 4-216 InstanceTagItem

Parameter	Type	Description
key	String	Definition Tag key. Range N/A
value	String	Definition Tag value. Range N/A

Status code: 400**Table 4-217** Response body parameters

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

Status code: 500

Table 4-218 Response body parameters

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

Example Request

Querying TaurusDB instances whose private IP addresses are 192.*.*

```
GET https://{endpoint}/v3.1/054e292c9880d4992f02c0196d3ea468/instances?
id=61a4ea66210545909d74a05c27a7179ein07&name=gaussdb-mysql-
instance01&type=Cluster&datastore_type=gaussdb-mysql&vpc_id=3cedfc54-b105-4652-
a4e0-847b11576b58&subnet_id=c1cfa53c-65d3-431e-8552-326bf310c7ad&private_ip=192.*.*&offset=0&limi
t=10&tags=taurusKey1=value1
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 1,
  "instances": [ {
    "id": "61a4ea66210545909d74a05c27a7179ein07",
    "name": "gaussdb-mysql-instance01",
    "status": "normal",
    "port": 3306,
    "type": "Cluster",
    "private_ips": [ "192.*.*" ],
    "readonly_private_ips": [ "192.*.*", "192.*.*" ],
    "proxy_ips": [ "192.*.*" ],
    "db_user_name": "root",
    "region": "region-1",
    "datastore": {
      "type": "gaussdb-mysql",
      "version": "8.0",
      "kernel_version": "2.0.29.1"
    },
    "created": "2018-08-20T02:33:49_0800",
    "updated": "2018-08-20T02:33:49_0800",
    "volume": {
      "type": "POOL",
      "size": 100
    },
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",
    "flavor_ref": "gaussdb.mysql.c3.small.4",
    "flavor_info": {
      "vcpus": 8,
      "ram": 16
    },
    "backup_strategy": {
      "start_time": "19:00-20:00",
      "keep_days": 7
    },
    "charge_info": {
      "charge_mode": "postPaid"
    },
    "enterprise_project_id": 0,
```

```
"time_zone": "UTC",
"tags": [{
  "key": "Key1",
  "value": "value1"
}]
}]
}
```

Status Code

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

Error Code

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

4.3.32 Querying Details of a DB Instance

Function

This API is used to query the details of a specified DB instance. Before using this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3.1/{project_id}/instances/{instance_id}

Table 4-219 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Instance ID, which is compliant with the UUID format.

Request Parameters

Table 4-220 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-221 Response body parameter

Parameter	Type	Description
instance	MysqlInstanceInfoDetailUnifyStatus object	Definition Instance information.

Table 4-222 MysqlInstanceInfoDetailUnifyStatus

Parameter	Type	Description
id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range N/A
project_id	String	Definition Project ID of a tenant in a region. Range N/A
status	String	Definition Instance status. Range ● creating: The instance is being created. ● normal: The instance is normal. ● abnormal: The instance is abnormal. ● createfail: The instance failed to be created.
port	String	Definition Database port. Range N/A
alias	String	Definition Instance description. Range N/A
type	String	Definition Instance type. Range Cluster
charge_info	MysqlInstanceChargeInfo object	Definition Billing information.

Parameter	Type	Description
node_count	Integer	Definition Number of nodes. Range N/A
datastore	MysqlDatastoreWithKernelVersion object	Definition Database information.
backup_used_space	Double	Definition Used backup space, in GB. Range N/A
created	String	Definition Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Update time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
private_write_ips	Array of strings	Definition Private IP addresses for write of instances. Range N/A

Parameter	Type	Description
private_dns_names	Array of strings	Definition Private domain names of instances. After an instance is created, you need to manually apply for a private domain name, or the private domain name is left blank. Range N/A
public_ips	String	Definition EIPs. Range N/A
db_username	String	Definition Default username. Range N/A
vpc_id	String	Definition VPC ID. Range N/A
subnet_id	String	Definition Network ID of the subnet. Range N/A
security_group_id	String	Definition Security group ID. Range N/A
configuration_id	String	Definition ID of the parameter template used for creating an instance or ID of the latest parameter template that is applied to an instance. Range N/A
backup_strategy	MySQLBackupStrategy object	Definition Automated backup policy. Constraints N/A

Parameter	Type	Description
nodes	Array of MysqlInstanceNodeInfo objects	Definition Node information.
enterprise_project_id	String	Definition Enterprise project ID. Range N/A
time_zone	String	Definition Time zone. Range N/A
az_mode	String	Definition AZ type. Range • single: single AZ • multi: multiple AZs
master_az_code	String	Definition Primary AZ. Range N/A
maintenance_window	String	Definition Maintenance window in the UTC format. Range N/A
tags	Array of MysqlTags objects	Definition Instance tags. Range N/A
dedicated_resource_id	String	Definition Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool. Range N/A
proxies	Array of MysqlProxyInfo objects	Definition Proxy information.

Parameter	Type	Description
tde_info	MysqlTdeInfo object	Definition TDE configuration. The AES-256 and SM4 algorithms are supported. TDE is in the open beta test (OBT) phase. To use it, submit a service ticket.

Table 4-223 MysqlInstanceChargeInfo

Parameter	Type	Description
charge_mode	String	Definition Billing mode. Range • prePaid: yearly/monthly • postPaid: pay-per-use
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly instances. Range N/A

Table 4-224 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	Definition DB engine. Range gaussdb-mysql
version	String	Definition DB version. Range N/A
kernel_version	String	Definition DB kernel version. Range N/A

Table 4-225 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Definition Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00. Default Value N/A
keep_days	String	Definition Retention period of automated backups. Constraints The value must be a positive integer. Range 1-732 Default Value N/A

Table 4-226 MysqlInstanceNodeInfo

Parameter	Type	Description
id	String	Definition Instance ID, which is compliant with the UUID format. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Node name. Range N/A

Parameter	Type	Description
type	String	Definition Node type. Range • master: primary node • slave: read replica
status	String	Definition Node status. Range N/A
port	Integer	Definition Database port. Range N/A
private_read_ips	Array of strings	Definition Private IP addresses for read of nodes. Range N/A
volume	MysqlInstanceNodeVolumeInfo object	Definition Storage disk information. Range N/A
az_code	String	Definition AZ. Range N/A
region_code	String	Definition Region where an instance is deployed. Range N/A

Parameter	Type	Description
created	String	Definition Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Update time. The format is the same as that of the created field. Range N/A
flavor_id	String	Definition Specification ID. Range N/A
flavor_ref	String	Definition Specification code. Range N/A
max_connections	String	Definition Maximum number of connections. Range N/A
vcpus	String	Definition Number of vCPUs. Range N/A
ram	String	Definition Memory size, in GB. Range N/A

Parameter	Type	Description
need_restart	Boolean	Definition Whether to reboot the instance for the parameter modifications to take effect. Range N/A
priority	Integer	Definition Failover priority. Range -1 or 1-16

Table 4-227 MysqlInstanceNodeVolumeInfo

Parameter	Type	Description
type	String	Definition Disk type. Range N/A
used	String	Definition Used disk size, in GB. Range N/A
size	Long	Definition Storage space of a yearly/monthly instance, in GB. Range N/A

Table 4-228 MysqlTags

Parameter	Type	Description
key	String	Definition Tag key. Constraints It cannot be an empty string, a space, or left blank. Range The value contains a maximum of 36 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A
value	String	Definition Tag value. Constraints It can be an empty string. Range The value contains a maximum of 43 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Table 4-229 MysqlProxyInfo

Parameter	Type	Description
pool_id	String	Definition Proxy instance ID. Range N/A
name	String	Definition Proxy instance name. Range N/A

Parameter	Type	Description
address	String	Definition Proxy address. Range N/A

Table 4-230 MysqlTdeInfo

Parameter	Type	Description
enable_tde	Boolean	Definition Whether to enable TDE. Constraints N/A Range • true: TDE is enabled. • false: TDE is disabled. Default Value N/A
encryption_type	String	Definition TDE algorithm. Constraints N/A Range • AES256 • SM4 Default Value N/A

Status code: 400**Table 4-231** Response body parameters

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

Status code: 500

Table 4-232 Response body parameters

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

Example Request

Querying details of a specified DB instance

```
GET https://{endpoint}/v3.1/3cedfc54-b105-4652-a4e0-847b11576628/instances/  
d738399de028480fabb2b8120d4e01a4in07
```

Example Response

Status code: 200

Success.

```
{  
  "instance": {  
    "id": "d738399de028480fabb2b8120d4e01a4in07",  
    "name": "gaussdb-mysql-instance01",  
    "alias": "",  
    "status": "normal",  
    "project_id": "3cedfc54-b105-4652-a4e0-847b11576628",  
    "enterprise_project_id": 0,  
    "type": "Cluster",  
    "charge_info": {  
      "charge_mode": "postPaid",  
      "order_id": ""  
    },  
    "node_count": 2,  
    "datastore": {  
      "type": "gaussdb-mysql",  
      "version": "8.0",  
      "kernel_version": "2.0.29.1"  
    },  
    "created": "2022-07-14T16:26:58+0800",  
    "updated": "2022-07-18T14:20:33+0800",  
    "public_ips": "10.*.*",  
    "private_write_ips": [ "192.*.*" ],  
    "private_dns_names": [ "d738399de028480fabb2b8120d4e01a4in07.internal.cn-  
xianhz-1.gaussdbformysql.myhuaweicloud.com" ],  
    "db_user_name": "root",  
    "port": 3306,  
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",  
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",  
    "backup_strategy": {  
      "start_time": "19:00-20:00",  
      "keep_days": 7  
    },  
    "nodes": [ {  
      "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",  
      "name": "gauss-d616-lb07_node01",  
      "type": "master",  
      "status": "normal",  
      "port": 3306,  
      "private_read_ips": [ "192.*.*" ],  
      "volume": {  
        "type": "POOL",
```

```
{
  "used" : 0.07
},
"az_code" : "az1",
"region_code" : "region-1",
"flavor_id" : "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
"flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
"max_connections" : 1500,
"vcpus" : 1,
"ram" : 4,
"need_restart" : false,
"priority" : 1,
"created" : "2022-07-14T16:26:58+0800",
"updated" : "2022-07-18T09:24:18+0800"
}, {
  "id" : "799a0f2fa49a4151bf9f7063c1fbba35no07",
  "name" : "gauss-d616-lb07_node02",
  "type" : "slave",
  "status" : "normal",
  "port" : 3306,
  "private_read_ips" : [ "192.*.*" ],
  "volume" : {
    "type" : "POOL",
    "used" : 0.07
  },
  "az_code" : "az1*",
  "region_code" : "region-1",
  "flavor_id" : "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
  "max_connections" : 1500,
  "vcpus" : 1,
  "ram" : 4,
  "need_restart" : false,
  "priority" : 1,
  "created" : "2022-07-14T16:26:58+0800",
  "updated" : "2022-07-18T09:36:18+0800"
} ],
"time_zone" : "UTC+08:00",
"backup_used_space" : 0.24,
"az_mode" : "single",
"master_az_code" : "az1",
"maintenance_window" : "18:00-22:00",
"tags" : [ ],
"configuration_id" : "53570e0de54e40c5a15f331aa5sd2176pr07",
"dedicated_resource_id" : "",
"proxies" : [ {
  "pool_id" : "dab1cfc5150c4d1ca0e8c6596bfc0d8cpo01",
  "address" : "192.*.*",
  "name" : "proxy-name"
} ]
}
}
```

Status Code

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

Error Code

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

4.3.33 Querying Details of DB Instances in Batches

Function

This API is used to query details of DB instances in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3.1/{project_id}/instances/details

Table 4-233 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-234 Query parameter

Parameter	Mandatory	Type	Description
instance_ids	Yes	String	Definition List of instance IDs. Constraints The list can contain a maximum of 20 instance IDs. Range An instance ID can contain 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-235 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-236 Response body parameter

Parameter	Type	Description
instances	Array of MysqlInstanceInfoDetailUnifyStatus objects	Definition Instance details.

Table 4-237 MysqlInstanceInfoDetailUnifyStatus

Parameter	Type	Description
id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range N/A
project_id	String	Definition Project ID of a tenant in a region. Range N/A
status	String	Definition Instance status. Range • creating: An instance is being created. • normal: An instance is normal. • abnormal: An instance is abnormal. • createfail: An instance failed to be created.
port	String	Definition Database port. Range N/A
alias	String	Definition Instance description. Range N/A
type	String	Definition Instance type. Range Cluster
charge_info	MysqlInstanceChargeInfo object	Definition Billing information.

Parameter	Type	Description
node_count	Integer	Definition Number of nodes. Range N/A
datastore	MysqlDatastoreWithKernelVersion object	Definition Database information.
backup_used_space	Double	Definition Used backup space, in GB. Range N/A
created	String	Definition Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Update time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
private_write_ips	Array of strings	Definition Private IP addresses for write of instances. Range N/A

Parameter	Type	Description
private_dns_names	Array of strings	Definition Private domain names of instances. After an instance is created, you need to manually apply for a private domain name, or the private domain name is left blank. Range N/A
public_ips	String	Definition EIPs. Range N/A
db_username	String	Definition Default username. Range N/A
vpc_id	String	Definition VPC ID. Range N/A
subnet_id	String	Definition Network ID of the subnet. Range N/A
security_group_id	String	Definition Security group ID. Range N/A
configuration_id	String	Definition ID of the parameter template used for creating an instance or ID of the latest parameter template that is applied to an instance. Range N/A
backup_strategy	MySQLBackupStrategy object	Definition Automated backup policy. Constraints N/A

Parameter	Type	Description
nodes	Array of MysqlInstanceNodeInfo objects	Definition Node information.
enterprise_project_id	String	Definition Enterprise project ID. Range N/A
time_zone	String	Definition Time zone. Range N/A
az_mode	String	Definition AZ type. Range • single: single AZ • multi: multiple AZs
master_az_code	String	Definition Primary AZ. Range N/A
maintenance_window	String	Definition Maintenance window in the UTC format. Range N/A
tags	Array of MysqlTags objects	Definition Instance tags. Range N/A
dedicated_resource_id	String	Definition Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool. Range N/A
proxies	Array of MysqlProxyInfo objects	Definition Proxy information.

Parameter	Type	Description
tde_info	MysqlTdeInfo object	Definition TDE configuration. The AES-256 and SM4 algorithms are supported. TDE is in the open beta test (OBT) phase. To use it, submit a service ticket.

Table 4-238 MysqlInstanceChargeInfo

Parameter	Type	Description
charge_mode	String	Definition Billing mode. Range • prePaid: yearly/monthly • postPaid: pay-per-use
order_id	String	Definition Order ID. This parameter is only returned for yearly/monthly instances. Range N/A

Table 4-239 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	Definition DB engine. Range gaussdb-mysql
version	String	Definition DB version. Range N/A
kernel_version	String	Definition DB kernel version. Range N/A

Table 4-240 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Definition Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00. Default Value N/A
keep_days	String	Definition Retention period of automated backups. Constraints The value must be a positive integer. Range 1-732 Default Value N/A

Table 4-241 MysqlInstanceNodeInfo

Parameter	Type	Description
id	String	Definition Instance ID, which is compliant with the UUID format. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Node name. Range N/A

Parameter	Type	Description
type	String	Definition Node type. Range • master: primary node • slave: read replica
status	String	Definition Node status. Range N/A
port	Integer	Definition Database port. Range N/A
private_read_ips	Array of strings	Definition Private IP addresses for read of nodes. Range N/A
volume	MysqlInstanceNodeVolumeInfo object	Definition Storage disk information. Range N/A
az_code	String	Definition AZ. Range N/A
region_code	String	Definition Region where an instance is deployed. Range N/A

Parameter	Type	Description
created	String	Definition Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Update time. The format is the same as that of the created field. Range N/A
flavor_id	String	Definition Specification ID. Range N/A
flavor_ref	String	Definition Specification code. Range N/A
max_connections	String	Definition Maximum number of connections. Range N/A
vcpus	String	Definition Number of vCPUs. Range N/A
ram	String	Definition Memory size, in GB. Range N/A

Parameter	Type	Description
need_restart	Boolean	Definition Whether to reboot the instance for the parameter modifications to take effect. Range N/A
priority	Integer	Definition Failover priority. Range -1 or 1-16

Table 4-242 MysqlInstanceNodeVolumeInfo

Parameter	Type	Description
type	String	Definition Disk type. Range N/A
used	String	Definition Used disk size, in GB. Range N/A
size	Long	Definition Storage space of a yearly/monthly instance, in GB. Range N/A

Table 4-243 MysqlTags

Parameter	Type	Description
key	String	Definition Tag key. Constraints It cannot be an empty string, a space, or left blank. Range The value contains a maximum of 36 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A
value	String	Definition Tag value. Constraints It can be an empty string. Range The value contains a maximum of 43 Unicode characters. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Table 4-244 MysqlProxyInfo

Parameter	Type	Description
pool_id	String	Definition Proxy instance ID. Range N/A
name	String	Definition Proxy instance name. Range N/A

Parameter	Type	Description
address	String	Definition Proxy address. Range N/A

Table 4-245 MysqlTdeInfo

Parameter	Type	Description
enable_tde	Boolean	Definition Whether to enable TDE. Constraints N/A Range • true: TDE is enabled. • false: TDE is disabled. Default Value N/A
encryption_type	String	Definition TDE algorithm. Constraints N/A Range • AES256 • SM4 Default Value N/A

Status code: 400**Table 4-246** Response body parameters

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

Status code: 500

Table 4-247 Response body parameters

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

Example Request

Querying details of DB instances in batches

```
GET https://{endpoint}/v3.1/97b026aa9cc4417888c14c84a1ad9860/instances/details?instance_ids=11684a0e59e94bceba7880d58cfb07b5in07
```

Example Response

Status code: 200

Success.

```
{
  "instances": [ {
    "id": "11684a0e59e94bceba7880d58cfb07b5in07",
    "name": "gaussdb-mysql-instance01",
    "alias": "",
    "status": "normal",
    "project_id": "3cedfc54-b105-4652-a4e0-847b11576628",
    "enterprise_project_id": 0,
    "type": "Cluster",
    "charge_info": {
      "charge_mode": "postPaid",
      "order_id": ""
    },
    },
    "node_count": 2,
    "datastore": {
      "type": "gaussdb-mysql",
      "version": "8.0",
      "kernel_version": "2.0.29.1"
    },
    "created": "2022-07-14T16:26:58+0800",
    "updated": "2022-07-18T14:20:33+0800",
    "public_ips": "10.*.*",
    "private_write_ips": [ "192.*.*" ],
    "private_dns_names": [ "11684a0e59e94bceba7880d58cfb07b5in07.internal.cn-
xianhz-1.gaussdbformysql.myhuaweicloud.com" ],
    "db_user_name": "root",
    "port": 3306,
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",
    "backup_strategy": {
      "start_time": "19:00-20:00",
      "keep_days": 7
    },
    },
    "nodes": [ {
      "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",
      "name": "gauss-d616-lb07_node01",
      "type": "master",
      "status": "normal",
      "port": 3306,
      "private_read_ips": [ "192.*.*" ],
      "volume": {
        "type": "POOL",
```

```
{
  "used" : 0.07
},
"az_code" : "az1xahz",
"region_code" : "region-1",
"flavor_id" : "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
"flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
"max_connections" : 1500,
"vcpus" : 1,
"ram" : 4,
"need_restart" : false,
"priority" : 1,
"created" : "2022-07-14T16:26:58+0800",
"updated" : "2022-07-18T09:24:18+0800"
}, {
  "id" : "799a0f2fa49a4151bf9f7063c1fbba35no07",
  "name" : "gauss-d616-lb07_node02",
  "type" : "slave",
  "status" : "normal",
  "port" : 3306,
  "private_read_ips" : [ "192.*.*" ],
  "volume" : {
    "type" : "POOL",
    "used" : 0.07
  },
  "az_code" : "az1",
  "region_code" : "region-1",
  "flavor_id" : "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref" : "gaussdb.mysql.xlarge.arm.4",
  "max_connections" : 1500,
  "vcpus" : 1,
  "ram" : 4,
  "need_restart" : false,
  "priority" : 1,
  "created" : "2022-07-14T16:26:58+0800",
  "updated" : "2022-07-18T09:36:18+0800"
} ],
"time_zone" : "UTC+08:00",
"backup_used_space" : 0.24,
"az_mode" : "single",
"master_az_code" : "az1",
"maintenance_window" : "18:00-22:00",
"tags" : [ ],
"configuration_id" : "53570e0de54e40c5a15f331aa5sd2176pr07",
"dedicated_resource_id" : "",
"proxies" : [ {
  "pool_id" : "dab1cfc5150c4d1ca0e8c6596bfc0d8cpo01",
  "address" : "192.*.*",
  "name" : "proxy-name"
} ]
} ]
}
```

Status Code

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

Error Code

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

4.3.34 Configuring a Recycling Policy

Function

This API is used to configure a recycling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/recycle-policy

Table 4-248 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-249 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-250 Request body parameter

Parameter	Mandatory	Type	Description
recycle_policy	No	Table 4-251 object	Definition Recycling policy. Constraints N/A

Table 4-251 RecyclePolicy

Parameter	Mandatory	Type	Description
retention_period_in_days	Yes	String	Definition Retention days. Constraints N/A Range 1–7 Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-252 Response body parameters

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

Status code: 500

Table 4-253 Response body parameters

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

Example Request

Setting the retention period in the recycling policy to 5 days

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/recycle-policy
{
  "recycle_policy": {
    "retention_period_in_days": 5
  }
}
```

Example Response

None

Status Code

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

Error Code

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

4.3.35 Querying a Recycling Policy

Function

This API is used to query a recycling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/recycle-policy

Table 4-254 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-255 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-256** Response body parameter

Parameter	Type	Description
recycle_policy	RecyclePolicy object	Definition Recycling policy. Constraints N/A

Table 4-257 RecyclePolicy

Parameter	Type	Description
retention_period_in_days	String	Definition Retention days. Constraints N/A Range 1–7 Default Value N/A

Status code: 400**Table 4-258** Response body parameters

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

Status code: 500**Table 4-259** Response body parameters

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

Example Request

Querying a recycling policy

GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/recycle-policy

Example Response

Status code: 200

Success.

```
{
  "recycle_policy" : {
    "retention_period_in_days" : 5
  }
}
```

```
}  
}
```

Status Code

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

Error Code

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

4.3.36 Querying Instances in the Recycle Bin

Function

This API is used to query instances in the recycle bin. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/recycle-info

Table 4-260 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-261 Query parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 100
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Request Parameters

Table 4-262 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-263 Response body parameters

Parameter	Type	Description
total_count	String	Definition Total number of records. Range N/A

Parameter	Type	Description
instances	Array of RecycleInstanceV3 objects	Definition Instances in the recycle bin.

Table 4-264 RecycleInstanceV3

Parameter	Type	Description
id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
ha_mode	String	Definition Instance type. Range N/A
engine_name	String	Definition Engine name. Range N/A
engine_version	String	Definition Engine version. Range N/A
pay_model	String	Definition Billing mode. Range N/A

Parameter	Type	Description
create_at	Integer	Definition Creation time. Range N/A
deleted_at	Integer	Definition Deletion time. Range N/A
volume_type	String	Definition Storage type. Range N/A
volume_size	String	Definition Storage size. Range N/A
data_vip	String	Definition Virtual IP address of the data plane. Range N/A
data_vip_ipv6	String	Definition IPv6 address of the data plane. Range N/A
enterprise_project_id	String	Definition Enterprise project ID. Range N/A
enterprise_project_name	String	Definition Enterprise project name. Range N/A
backup_level	String	Definition Backup level. Range N/A

Parameter	Type	Description
recycle_backup_id	String	Definition Backup ID. Range N/A
recycle_status	String	Definition Recycling status. Range N/A

Status code: 400

Table 4-265 Response body parameters

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

Status code: 500

Table 4-266 Response body parameters

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

Example Request

Querying instances in the recycle bin

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/recycle-info
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 2,
  "instances": [ {
    "id": "090e539b45e047ee9cc17750b321ef7ein07",
    "name": "gauss-dd-single",
```



```
"ha_mode" : "StandSingle",
"engine_name" : "taurus",
"engine_version" : "2.0.51.240300",
"pay_model" : "0",
"create_at" : 1712656933705,
"deleted_at" : 1712659228276,
"volume_type" : "",
"volume_size" : "0",
"data_vip" : "172.16.1.234",
"data_vip_ipv6" : null,
"enterprise_project_id" : "0",
"enterprise_project_name" : "default",
"backup_level" : "2",
"recycle_backup_id" : "c62e218ccd6c49098baa925453c65e29br07",
"recycle_status" : "Active"
}, {
  "id" : "632423cc56c348bd967b3a03e7abdab9in07",
  "name" : "gauss-dd-single",
  "ha_mode" : "StandSingle",
  "engine_name" : "taurus",
  "engine_version" : "2.0.51.240300",
  "pay_model" : "0",
  "create_at" : 1712658210524,
  "deleted_at" : 1712659158927,
  "volume_type" : "",
  "volume_size" : "0",
  "data_vip" : "172.16.1.194",
  "data_vip_ipv6" : null,
  "enterprise_project_id" : "0",
  "enterprise_project_name" : "default",
  "backup_level" : "2",
  "recycle_backup_id" : "70d03dc459304f7298c0f5b49286f37cbr07",
  "recycle_status" : "Active"
}]
}
```

Status Code

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

Error Code

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

4.3.37 Changing Node Names in Batches

Function

This API is used to change node names in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/nodes/name

Table 4-267 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-268 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-269 Request body parameter

Parameter	Mandatory	Type	Description
node_list	Yes	Array of SingleNodeInfo objects	Definition Node information. Constraints N/A

Table 4-270 SingleNodeInfo

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
name	Yes	String	Definition Node name. Constraints N/A Range The name must start with a letter and consist of 4 to 128 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Response Parameters

Status code: 200

Table 4-271 Response body parameter

Parameter	Type	Description
job_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-272** Response body parameters

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

Status code: 500**Table 4-273** Response body parameters

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

Example Request

Changing node names in batches

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/nodes/name
```

```
{  
  "node_list": [ {  
    "node_id": "799a0f2fa49d4151bf2f7063c1fbba36no07",  
    "name": "gauss-cdf5_node03"  
  } ]  
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id": "dff1f289-4d23-4942-8d9f-463ea07c010d"  
}
```

Status Code

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

Error Code

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

4.3.38 Querying Historical Records of Auto Scaling

Function

This API is used to query historical records of auto scaling. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/auto-scaling/history

Table 4-274 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-275 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Request Parameters

Table 4-276 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-277 Response body parameters

Parameter	Type	Description
total_count	String	Definition Total number of scaling records. Range N/A

Parameter	Type	Description
records	Array of AutoScalingRecordInfo objects	Definition Historical records of auto scaling.

Table 4-278 AutoScalingRecordInfo

Parameter	Type	Description
id	String	Definition Record ID. Range N/A
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
scaling_type	String	Definition Scaling type. Range N/A
original_value	String	Definition Original value. Range N/A
target_value	String	Definition Target value. Range N/A

Parameter	Type	Description
result	String	Definition Scaling results. Range N/A
create_at	String	Definition Scaling time. Range N/A

Status code: 400

Table 4-279 Response body parameters

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

Status code: 500

Table 4-280 Response body parameters

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

Example Request

Querying historical records of auto scaling

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/auto-scaling/history
```

Example Response

Status code: 200

Success.

```
{  
  "total_count": 1,  
  "records": [ {  
    "id": "2f5f3eeb-16c7-4b0c-bd44-4b2968275abe",
```

```
"instance_id" : "94bb6ce031424d02a1c61019d1d2298bin07",
"instance_name" : "gaussdbformysql-ins01",
"scaling_type" : "ENLARGE_FLAVOR",
"original_value" : "gaussdb.mysql.medium.x86.4",
"target_value" : "gaussdb.mysql.large.x86.4",
"result" : "SUCCESSFUL",
"create_at" : "2023-04-30 16:47:40.877"
} ]
}
```

Status Code

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

Error Code

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

4.3.39 Setting a Policy for a Serverless DB Instance

Function

This API is used to set a policy for a serverless DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/serverless/policy

Table 4-281 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-282 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-283 Request body parameters

Parameter	Mandatory	Type	Description
min_vcpus	Yes	Integer	Definition Minimum number of vCPUs for a single node. Range You can obtain the value of this parameter from Querying Database Specifications .
max_vcpus	Yes	Integer	Definition Maximum number of vCPUs for a single node. Range You can obtain the value of this parameter from Querying Database Specifications .

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-284 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 4-285 Response body parameters

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

Example Request

Setting the minimum number of vCPUs to 1 and the maximum number of vCPUs to 4

```
PUT https://{Endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/serverless/policy  
{  
  "min_vcpus" : 1,  
  "max_vcpus" : 4  
}
```

Example Response

None

Status Code

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

Error Code

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

4.3.40 Changing the Failover Priority of a Read Replica

Function

This API is used to change the failover priority of a read replica. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/priority

Table 4-286 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-287 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-288 Request body parameter

Parameter	Mandatory	Type	Description
priority	Yes	String	Definition Failover priority. Constraints • The value can be -1 or any number ranging from 1 to 16. If the value is a positive number, a smaller value indicates a higher priority. This priority determines the order in which read replicas are promoted when recovering from a primary node failure. Read replicas with the same priority have the same probability of being promoted to the new primary node. • If the value is -1, the read replica does not participate in a failover. After the priority of a read replica is set to -1, ensure that a single-AZ instance still has at least one read replica or that the remaining nodes of a cross-AZ instance are in different AZs. Range 1–16, -1 Default Value N/A

Response Parameters

Status code: 200

Table 4-289 Response body parameter

Parameter	Type	Description
job_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-290** Response body parameters

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

Status code: 500**Table 4-291** Response body parameters

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

Example Request

Changing the read replica failover priority to 2

```
PUT https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07//nodes/ss62c18799854a919bab633874c159dfno01/priority
{
  "priority" : 2
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "b054f3e1-64f8-4219-ad48-f9ac494c6983"
}
```

Status Code

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

Error Code

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

4.3.41 Querying an EIP

Function

This API is used to query an EIP. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/eip

Table 4-292 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-293 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-294** Response body parameters

Parameter	Type	Description
can_enable_public_access	Boolean	Definition Whether public access can be enabled. Range true: Public access can be enabled. false: Public access cannot be enabled.

Parameter	Type	Description
id	String	Definition EIP ID. Range N/A
type	String	Definition Network type of the EIP. Range • 5_bgp: dynamic BGP • 5_sbgp: static BGP • 5_youxuanbgp: premium BGP
port_id	String	Definition Port ID. Range N/A
public_ip_address	String	Definition EIP. Range N/A
private_ip_address	String	Definition Private IP address bound to the EIP Range N/A

Parameter	Type	Description
status	String	Definition EIP status. Range • FREEZED: The EIP is frozen. • BIND_ERROR: The EIP failed to be bound. • BINDING: The EIP is being bound. • PENDING_DELETE: The EIP is being released. • PENDING_CREATE: The EIP is being created. • NOTIFYING: The EIP is being created. • NOTIFY_DELETE: The EIP is being released. • PENDING_UPDATE: The EIP is being updated. • DOWN: The EIP has not been bound. • ACTIVE: The EIP has been bound. • ELB: The EIP has been bound to a load balancer. • VPN: The EIP has been bound to a VPN. • ERROR: The EIP is failed.
tenant_id	String	Definition Tenant ID. Range N/A
create_time	String	Definition Time when the EIP was assigned. Range N/A
bandwidth_id	String	Definition Bandwidth ID. Range N/A
bandwidth_name	String	Definition Bandwidth name. Range N/A

Parameter	Type	Description
bandwidth_size	String	Definition Bandwidth, in Mbit/s Range N/A
bandwidth_share_type	String	Definition Bandwidth type. Range • PER: dedicated bandwidth • WHOLE: shared bandwidth
profile	Object	Definition Additional parameters, including the order ID and product ID. If profile is not empty, the EIP is billed on a yearly/monthly basis. Range N/A

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

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

Status code: 500**Table 4-296** Response body parameters

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

Example Request

Querying an EIP

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/12a49c2dc32648df8dd25e2976f70180in07/eip
```

Example Response

Status code: 200

Success.

```
{
  "can_enable_public_access" : true,
  "id" : "45a0ed37-cfa7-4403-8aeb-d720b4e831cf",
  "type" : "5_bgp",
  "port_id" : "2c02dc5b-a136-4921-b7ad-27e084548616",
  "public_ip_address" : "10.83.35.151",
  "private_ip_address" : "172.16.1.137",
  "status" : "ACTIVE",
  "tenant_id" : "23a50154cf494ec9ad6883979a12db0a",
  "create_time" : "2024-04-09 13:42:11",
  "bandwidth_id" : "2a4b2bc5-2a0a-42df-8f13-2fbe3d8bbbb2",
  "bandwidth_name" : "bandwidth-d3f4",
  "bandwidth_size" : 1,
  "bandwidth_share_type" : "PER",
  "profile" : { }
}
```

Status Code

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

Error Code

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

4.3.42 Querying a Storage Autoscaling Policy

Function

This API is used to query a storage autoscaling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/storage/auto-expand-policy

Table 4-297 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-298 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-299** Response body parameters

Parameter	Type	Description
switch_option	Boolean	Definition Whether to enable an autoscaling policy. Range N/A

Parameter	Type	Description
limit_size	Integer	Definition Limit of storage (GB) that can be automatically scaled up to. Range N/A
trigger_available_percent	Integer	Definition Percentage of available storage. The storage will be automatically scaled up if the available storage drops to or below the value of this parameter. Range N/A
step_percent	Integer	Definition Scaling step when the storage is scaled by percentage. Range N/A

Status code: 400**Table 4-300** Response body parameters

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

Status code: 500**Table 4-301** Response body parameters

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

Example Request

Querying a storage autoscaling policy

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/storage/auto-expand-policy
```

Example Response

Status code: 200

Success.

```
{  
  "switch_option" : false,  
  "limit_size" : 500,  
  "trigger_available_percent" : 10,  
  "step_percent" : 20  
}
```

Status Code

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

Error Code

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

4.3.43 Modifying a Storage Autoscaling Policy

Function

This API is used to modify a storage autoscaling policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
PUT /v3/{project_id}/instances/{instance_id}/storage/auto-expand-policy
```

Table 4-302 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-303 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-304 Request body parameters

Parameter	Mandatory	Type	Description
switch_option	No	Boolean	Definition Whether to enable an autoscaling policy. Range • true: enabled • false: disabled

Parameter	Mandatory	Type	Description
limit_size	No	Integer	Definition Limit of storage (GB) that can be automatically scaled up to. The value must be a multiple of 10. Range 10–Maximum storage Example: 500
trigger_available_percent	No	Integer	Definition Percentage of available storage. The storage will be automatically scaled up if the available storage drops to or below the value of this parameter. Range • 10 • 15 • 20
step_percent	No	Integer	Definition Scaling step when the storage is scaled by percentage. Range 5–50

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-305 Response body parameters

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

Status code: 500

Table 4-306 Response body parameters

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

Example Request

Modifying a storage autoscaling policy

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/storage/auto-expand-policy
{
  "switch_option" : true,
  "limit_size" : 500,
  "trigger_available_percent" : 10,
  "step_percent" : 20
}
```

Example Response

Status code: 200

Success.

```
{ }
```

Status Code

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

Error Code

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

4.3.44 Querying Database and Table Information of an Instance

Function

This API is used to query database and table information of an instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/table-info

Table 4-307 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-308 Query parameters

Parameter	Mandatory	Type	Description
database_name	No	String	Definition Database name. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
table_name	No	String	Definition Data table name. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-309 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-310 Response body parameters

Parameter	Type	Description
table_meta_infos	Array of TableMetaInfo objects	Definition Database table metadata information.
table_names	Array of strings	Definition Data table names.
database_names	Array of strings	Definition Database names.

Table 4-311 TableMetaInfo

Parameter	Type	Description
column_type	String	Definition Data type of a column. Range N/A
extra	String	Definition Extra information, for example, whether the column is an auto-increment column. Range N/A
is_nullable	String	Definition Whether the column data can be NULL . Range N/A
column_default	String	Definition Default value of a column. Range N/A

Parameter	Type	Description
column_key	String	Definition Whether the column is an index column. Range N/A
column_name	String	Definition Column name. Range N/A

Status code: 400

Table 4-312 Response body parameters

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

Status code: 500

Table 4-313 Response body parameters

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

Example Request

Querying database and table information of an instance

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
406f16a73f3045a7aca3b9a9d5bf361cin07/table-info
```

Example Response

Status code: 200

Success.

```
{  
  "table_meta_infos" : [ {  
    "columnType" : "int unsigned",
```

```
{
  "extra": "",
  "isNullable": true,
  "columnDefault": "None",
  "columnKey": "",
  "columnName": "age"
}, {
  "columnType": "int unsigned",
  "extra": "",
  "isNullable": false,
  "columnDefault": "None",
  "columnKey": "PRI",
  "columnName": "id"
}, {
  "columnType": "tinyint(1)",
  "extra": "",
  "isNullable": true,
  "columnDefault": "None",
  "columnKey": "",
  "columnName": "is_warhor"
}, {
  "columnType": "varchar(32)",
  "extra": "",
  "isNullable": true,
  "columnDefault": "None",
  "columnKey": "",
  "columnName": "name"
} ],
"table_names": [ ],
"database_names": [ ]
}
```

Status Code

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

Error Code

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

4.3.45 Upgrading Minor Versions of Instances in Batches

Function

This API is used to upgrade minor versions of instances in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Calling Method

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

URI

POST /v3/{project_id}/instances/database-version/upgrade

Table 4-314 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-315 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-316 Request body parameters

Parameter	Mandatory	Type	Description
databases_instance_infos	Yes	Array of UpgradeDataBasesSingleInstance objects	Definition Instances to be upgraded in batches. Constraints N/A
delay	Yes	String	Definition Whether to delay the upgrade. Constraints N/A Range true: The upgrade will be delayed. false: The upgrade will not be delayed. Default Value N/A

Table 4-317 UpgradeDatabasesSingleInstance

Parameter	Mandatory	Type	Description
current_version	Yes	String	Definition Current kernel version of the instance. Constraints N/A Range N/A Default Value N/A
instance_id	Yes	String	Definition Instance ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-318 Response body parameter

Parameter	Type	Description
resp	String	Definition API calling results. Range N/A

Status code: 400

Table 4-319 Response body parameters

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

Status code: 500

Table 4-320 Response body parameters

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

Example Request

Upgrading minor versions of instances in batches

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/database-version/upgrade
{
  "databases_instance_infos" : [ {
    "current_version" : "2.0.48.231200",
    "instance_id" : "6754902da1f447269c6979b0590102a5in07"
  } ],
  "delay" : false
}
```

Example Response

Status code: 200

Success.

```
{
  "resp" : "success"
}
```

Status Code

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

Error Code

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

4.4 Backup Management

4.4.1 Configuring a Same-Region Backup Policy

Function

This API is used to configure a same-region backup policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/backups/policy/update

Table 4-321 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-322 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-323 Request body parameters

Parameter	Mandatory	Type	Description
backup_policy	Yes	MysqlBackup Policy object	Definition Database backup policy. Constraints N/A

Table 4-324 MysqlBackupPolicy

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Backup time window. Automated backups will be triggered during the backup time window. Constraints N/A Range The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. 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 . Default Value N/A
keep_days	Yes	Integer	Definition Backup retention days. Constraints N/A Range 1–732. You can also contact customer service to extend the retention period to up to 3,660 days. Default Value N/A

Parameter	Mandatory	Type	Description
period	Yes	String	Definition Backup cycle. Data will be automatically backed up on the selected days every week. Constraints The value is a list of numbers separated by commas (,), where each number plus one represents a day of the week for automated backups. For example, 1,2,3,4,5,6,7 indicates that data is backed up every day from Tuesday to Monday. Range You can select multiple numbers from 1 to 7 and separate them with commas (,). Default Value N/A
retention_number_backup_level1	No	Integer	Definition Number of retained level-1 backups. Constraints This parameter is only required when the level-1 backup function is enabled. Range 0 or 1 Default Value 0

Response Parameters

Status code: 200

Table 4-325 Response body parameters

Parameter	Type	Description
status	String	Definition Status. Range N/A
instance_id	String	Definition Instance ID, which is compliant with the UUID format. Range The value is the same as the instance ID in the request.
instance_name	String	Definition Instance name. Range Instance name corresponding to the instance ID

Status code: 400**Table 4-326** Response body parameters

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

Status code: 500**Table 4-327** Response body parameters

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

Example Request

Modifying the automated backup policy of the DB instance (Data is backed up from 19:00 to 20:00 every Monday to Friday. Backup files are stored for seven days.)

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/backups/policy/update
{
  "backup_policy" : {
    "keep_days" : 7,
    "start_time" : "19:00-20:00",
    "period" : "1,2,3,4,5"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "status" : "COMPLETED",
  "instance_id" : "ba62a0b83a1b42bfab275829d86ac0fdin07",
  "instance_name" : "gauss-mysql"
}
```

Status Code

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

Error Code

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

4.4.2 Creating a Manual Backup

Function

This API is used to create a manual backup. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/backups/create

Table 4-328 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-329 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-330 Request body parameters

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	Yes	String	Definition Backup name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
description	No	String	Definition Backup description. Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: !<"='>&

Response Parameters

Status code: 201

Table 4-331 Response body parameters

Parameter	Type	Description
backup	backup object	Definition Backup information.
job_id	String	Definition Task ID. Range N/A

Table 4-332 backup

Parameter	Type	Description
id	String	Definition Backup ID. Range N/A
name	String	Definition Backup name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
description	String	Definition Backup description. Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: ! <"='>&
begin_time	String	Definition Backup start time in the "yyyy-mm-ddThh:mm:ssZ" format, where "T" indicates the start time of the time field, and "Z" indicates the time zone offset. Range N/A

Parameter	Type	Description
status	String	Definition Backup status. Range • BUILDING: backup in progress • COMPLETED: backup completed • FAILED: backup failed • AVAILABLE: backup available
type	String	Definition Backup type. Range manual : manual full backup
instance_id	String	Definition Instance ID. Range The value is the same as the instance ID in the request.

Status code: 400**Table 4-333** Response body parameters

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

Status code: 500**Table 4-334** Response body parameters

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

Example Request

Creating a manual backup

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/backups/create
{
```

```
"instance_id" : "07033b125fd94a8a96896f8bcfee6ddain07",  
"name" : "backup-1",  
"description": "Manual backup"  
}
```

Example Response

Status code: 201

Success.

```
{  
  "backup" : {  
    "id" : "2f4ddb93-b901-4b08-93d8-1d2e472f30fe",  
    "name" : "backup-1",  
    "description": "Manual backup"  
    "begin_time" : "2020-07-07T01:17:05+0800",  
    "status" : "BUILDING",  
    "type" : "manual",  
    "instance_id" : "07033b125fd94a8a96896f8bcfee6ddain07"  
  },  
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

Status Code

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

Error Code

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

4.4.3 Querying Full Backups

Function

This API is used to query backups according to search criteria. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/backups

Table 4-335 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-336 Query parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
backup_id	No	String	Definition Backup ID, which uniquely identifies a backup. Constraints N/A Range The value contains 36 characters with a suffix of br07 . Only letters and digits are allowed. Default Value N/A
backup_type	No	String	Definition Backup type. Constraints N/A Range • auto: automated full backup • manual: manual full backup Default Value N/A
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100
begin_time	No	String	Definition Query start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100. Constraints N/A Range The time is earlier than the current time. Default Value N/A

Parameter	Mandatory	Type	Description
end_time	No	String	Definition Query end time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Constraints N/A Range The time is earlier than the current time and later than the start time. Default Value N/A
name	No	String	Definition Backup name. Constraints N/A Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_name	No	String	Definition Instance name. Constraints N/A Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Request Parameters

Table 4-337 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-338 Response body parameters

Parameter	Type	Description
backups	Array of backups objects	Definition Backup information. Range N/A
total_count	Long	Definition Total number of backup files. Range ≥ 0

Table 4-339 backups

Parameter	Type	Description
id	String	Definition Backup ID. Range The value contains 36 characters with a suffix of br07 . Only letters and digits are allowed.

Parameter	Type	Description
name	String	Definition Backup name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
begin_time	String	Definition Backup start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
end_time	String	Definition Backup end time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
status	String	Definition Backup status. Range ● BUILDING: backup in progress ● COMPLETED: backup completed ● FAILED: backup failed ● AVAILABLE: backup available
take_up_time	Integer	Definition Backup duration in minutes. Range ≥ 0

Parameter	Type	Description
type	String	Definition Backup type. Range • auto: automated full backup • manual: manual full backup
size	Long	Definition Backup size in MB. Range ≥ 0
datastore	MysqlDatastore object	Definition Database information.
instance_id	String	Definition Instance ID, which uniquely identifies an instance. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
backup_level	String	Definition Backup level. This parameter is returned when level-1 backup is enabled. Range • 0: Backup being created or creation failed • 1: level-1 backup • 2: level-2 backup
description	String	Definition Description of the backup file. Range N/A

Table 4-340 MysqlDatastore

Parameter	Type	Description
type	String	Definition DB engine. Range gaussdb-mysql
version	String	Definition DB version. Range 8.0

Status code: 400**Table 4-341** Response body parameters

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

Status code: 500**Table 4-342** Response body parameters

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

Example Request

Querying automated backups generated from July 6, 2020 to July 16, 2020

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/backups?instance_id=43e4fea4b48f11e89039fa163ebaa7e4br01&backup_id=c0c9f155c7b7423a9d30f0175998b63bbr01&backup_type=auto&offset=0&limit=10&begin_time=2020-07-06T10:41:14+0800&end_time=2020-07-16T10:41:14+0800
```

Example Response

Status code: 200

Success.

```
{  
  "backups": [ {
```

```
{
  "id" : "1fe4feaab48f11e6654hfa163eba87e4b66u",
  "name" : "TaurusDB-gauss-e747-20200705185048266",
  "begin_time" : "2018-08-06T12:41:14+0800",
  "end_time" : "2018-08-06T12:45:14+0800",
  "take_up_time" : 2,
  "status" : "COMPLETED",
  "type" : "auto",
  "size" : 2803,
  "datastore" : {
    "type" : "GaussDB(for MySQL)",
    "version" : "8.0"
  },
  "instance_id" : "43e4feaab48f11e89039fa163ebaa7e4br01",
  "instance_name" : "TaurusDB-gauss-e747",
  "backup_level" : "2"
},
{
  "total_count" : 1
}
```

Status Code

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

Error Code

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

4.4.4 Querying an Automated Backup Policy

Function

This API is used to query an automated backup policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/backups/policy

Table 4-343 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-344 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-345** Response body parameters

Parameter	Type	Description
backup_policy	BackupPolicy object	Definition Backup policy information.

Table 4-346 BackupPolicy

Parameter	Type	Description
keep_days	Integer	Definition Backup retention days. Range 1–732. You can also contact customer service to extend the retention period to up to 3,660 days.
start_time	String	Definition Backup time window. Automated backups will be triggered during the backup time window. Range The value must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format.
period	String	Definition Backup cycle. Data will be automatically backed up on the selected days every week. Range The value is a list of numbers separated by commas (,), where each number plus one represents a day of the week for automated backups. For example, 1,2,3,4,5,6,7 indicates that data is backed up every day from Tuesday to Monday.
retention_number_backup_level1	Integer	Definition Number of retained level-1 backups. This parameter is returned when level-1 backup is enabled. Range N/A

Status code: 400**Table 4-347** Response body parameters

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

Status code: 500

Table 4-348 Response body parameters

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

Example Request

Querying the automated backup policy of a DB instance

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/backups/policy
```

Example Response

Status code: 200

Success.

```
{
  "backup_policy" : {
    "keep_days" : "7",
    "start_time" : "19:00-20:00",
    "period" : "1,2",
    "retention_num_backup_level1" : 1
  }
}
```

Status Code

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

Error Code

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

4.4.5 Deleting a Manual Backup

Function

This API is used to delete a manual backup. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
DELETE /v3/{project_id}/backups/{backup_id}
```

Table 4-349 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
backup_id	Yes	String	Definition Backup file ID. Constraints N/A Range To obtain this value, see Querying Full Backups . Default Value N/A

Request Parameters

Table 4-350 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-351** Response body parameters

Parameter	Type	Description
backup_id	String	Definition Backup ID. Range The value is the same as that of the input parameter.

Parameter	Type	Description
backup_name	String	Definition Backup name. Range Backup name corresponding to the backup ID.

Status code: 400

Table 4-352 Response body parameters

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

Status code: 500

Table 4-353 Response body parameters

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

Example Request

Deleting a manual backup

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/backups/  
1fe4feaab48f11e6654hfa163eba87e4b66
```

Example Response

Status code: 200

Success.

```
{  
  "backup_id" : "b1182ccdda034f2b9535f3dca5c47e71br07",  
  "backup_name" : "backup-f3c1"  
}
```

Status Code

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

Error Code

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

4.4.6 Restoring Data to the Original Instance or an Existing Instance

Function

This API is used to restore data to the original instance or an existing instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

DB instances will not be displayed unless they have the same DB engine type, version, and table name case sensitivity as the original DB instance.

URI

POST /v3/{project_id}/instances/restore

Table 4-354 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-355 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-356 Request body parameters

Parameter	Mandatory	Type	Description
target_instance_id	Yes	String	Definition Target instance ID. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
source_instance_id	Yes	String	Definition Source instance ID. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
type	Yes	String	Definition Restoration mode. Constraints N/A Range • backup: Data is restored using backups. In this case, backup_id is mandatory. • timestamp: Data is restored through PITR. In this case, restore_time is mandatory. Default Value N/A

Parameter	Mandatory	Type	Description
backup_id	No	String	Definition ID of the backup to be restored. This parameter must be specified when a backup is used for restoration. Constraints N/A Range N/A Default Value N/A
restore_time	No	Long	Definition Backup time point. Constraints The value is a Unix timestamp in milliseconds and represents UTC time. When specifying the parameter, convert the local time from your relevant time zone to a UTC timestamp first. For example, for a time in the Beijing time zone (UTC +08:00), subtract 8 hours to get the UTC timestamp. Range To obtain this value, see Querying the Restoration Time Range . Default Value N/A

Response Parameters

Status code: 200

Table 4-357 Response body parameter

Parameter	Type	Description
job_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-358** Response body parameters

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

Status code: 500**Table 4-359** Response body parameters

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

Example Request

- Restoring data to the original instance using a backup file
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/restore
{
 "target_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
 "source_instance_id" : "690e08a7c3854c218df0e59de3b0c6cein07",
 "backup_id" : "7ffbf305376b4cbea0ae491257b6aaf9br07",
 "type" : "backup"
}
- Restoring data to the original instance through PITR
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/restore
{
 "target_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
 "source_instance_id" : "690e08a7c3854c218df0e59de3b0c6cein07",
 "restore_time" : 1673852043000,
 "type" : "timestamp"
}
- Restoring data to an existing instance using a backup file
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/restore
{
 "target_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
 "source_instance_id" : "690e08a7c3854c218df0e59de3b0c6cein07",
 "backup_id" : "be4ddfd7e2b94640b5e2cb44efb30b22br07",
 "type" : "backup"
}
- Restoring data to an existing instance through PITR
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/restore
{
 "target_instance_id" : "7033e7c3cf93438797d44ad7ae0a7d95in07",
 "source_instance_id" : "690e08a7c3854c218df0e59de3b0c6cein07",
 "restore_time" : 1673852043000,
 "type" : "timestamp"
}

Example Response

Status code: 200

Success.

```
{
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.4.7 Querying the Restoration Time Range

Function

This API is used to query the restoration time range of an instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/restore-time

Table 4-360 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-361 Query parameter

Parameter	Mandatory	Type	Description
date	No	String	Definition Date to be queried. Constraints N/A Range The value is in the "yyyy-mm-dd" format, and the time zone is UTC. Default Value N/A

Request Parameters

Table 4-362 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-363** Response body parameter

Parameter	Type	Description
restore_times	Array of RestoreTimeInfo objects	Definition Restoration time ranges.

Table 4-364 RestoreTimeInfo

Parameter	Type	Description
start_time	Integer	Definition Start time of the restoration time range in the UNIX timestamp format. The unit is millisecond and the time zone is UTC. Range N/A
end_time	Integer	Definition End time of the restoration time range in the UNIX timestamp format. The unit is millisecond and the time zone is UTC. Range N/A

Status code: 400**Table 4-365** Response body parameters

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

Status code: 500**Table 4-366** Response body parameters

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

Example Request

Querying the restoration time range of the DB instance on January 31, 2023

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/restore-time?date=2023-01-31
```

Example Response

Status code: 200

Success.

```
{
  "restore_times" : [ {
    "start_time" : 1675149246000,
    "end_time" : 1675094400000
  } ]
}
```

Status Code

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

Error Code

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

4.4.8 Enabling or Disabling Encrypted Backup

Function

This API is used to enable or disable encrypted backup. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

POST /v3/{project_id}/instances/{instance_id}/backups/encryption

Table 4-367 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-368 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-369 Request body parameters

Parameter	Mandatory	Type	Description
encryption_status	Yes	String	Definition Whether to enable or disable encrypted backup. The value is case insensitive. Constraints N/A Range on: Encrypted backup is enabled. off: Encrypted backup is disabled. Default Value N/A
type	No	String	Definition Encryption type. Constraints Currently, only kms (case-insensitive) is supported. This parameter is mandatory when encrypted backup is enabled and is not required when encrypted backup is disabled. Range kms Default Value N/A

Parameter	Mandatory	Type	Description
kms_key_id	No	String	Definition KMS ID. This parameter is mandatory when encrypted backup is enabled and is not required when encrypted backup is disabled. To obtain the value, see the response parameter key_id in the API for creating a key . Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-370 Response body parameter

Parameter	Type	Description
encryption_status	String	Definition Whether encrypted backup is enabled. Range • on: Encrypted backup is enabled. • off: Encrypted backup is disabled.

Status code: 400

Table 4-371 Response body parameters

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

Status code: 500

Table 4-372 Response body parameters

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

Example Request

- Enabling encrypted backup
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption

```
{
  "type": "kms",
  "kms_key_id": "b82fa43f-f6e8-4ec4-9c31-231bc547c526",
  "encryption_status": "on"
}
```
- Disabling encrypted backup
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption

```
{
  "encryption_status": "off"
}
```

Example Response

Status code: 200

Success.

```
{
  "encryption_status": "on"
}
```

Status Code

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

Error Code

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

4.4.9 Checking Whether Encrypted Backup Is Enabled

Function

This API is used to check whether encrypted backup is enabled. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/backups/encryption

Table 4-373 URI 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 is compliant with the UUID format.

Request Parameters

Table 4-374 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-375 Response body parameter

Parameter	Type	Description
encryption_status	String	Definition Whether encrypted backup is enabled. Range • on: Encrypted backup is enabled. • off: Encrypted backup is disabled.

Status code: 400

Table 4-376 Response body parameters

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

Status code: 500

Table 4-377 Response body parameters

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

Example Request

Checking whether encrypted backup is enabled

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption
```

Example Response

Status code: 200

Success.

```
{
  "encryption_status" : "on"
}
```

Status Code

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

Error Code

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

4.4.10 Querying Incremental Backups

Function

This API is used to query incremental backups. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/incremental-backups

Table 4-378 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-379 Query parameters

Parameter	Mandatory	Type	Description
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 10, 20, and 50 Default Value 10

Parameter	Mandatory	Type	Description
begin_time	No	String	Definition Query start time. Constraints When begin_time is not empty, end_time is mandatory. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Default Value N/A
end_time	No	String	Definition Query end time. Constraints When end_time is not empty, begin_time is mandatory. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format and must be later than the query start time. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Default Value N/A

Request Parameters

Table 4-380 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-381** Response body parameters

Parameter	Type	Description
backups	Array of Incremental Backups objects	Definition Backup information.

Parameter	Type	Description
total_count	Long	Definition Total number of backup files. Range N/A

Table 4-382 IncrementalBackups

Parameter	Type	Description
id	String	Definition Backup ID. Range The value contains 36 characters with a suffix of br07 . Only letters and digits are allowed.
name	String	Definition Backup name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.
begin_time	String	Definition Backup start time. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .
end_time	String	Definition Backup end time. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .

Parameter	Type	Description
size	Number	Definition Backup size, in KB. Range N/A
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.

Status code: 400

Table 4-383 Response body parameters

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

Status code: 500

Table 4-384 Response body parameters

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

Example Request

Querying incremental backups generated from July 6, 2022 to July 16, 2022

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/incremental-backups?  
offset=0&limit=10&begin_time=2022-07-06T10:41:14+0800&end_time=2022-07-16T10:41:14+0800
```

Example Response

Status code: 200

Success.

```
{  
  "backups": [ {
```

```
{
  "id" : "f0d2aea28d26t4848b8c84ed3fea1822fbr07",
  "name" : "TaurusDB--20230728181555006",
  "begin_time" : "2022-07-07T12:41:14+0800",
  "end_time" : "2022-07-08T12:45:14+0800",
  "size" : 0.109375,
  "instance_id" : "61a4ea66210545909d74a05c27a7179ein07"
},
{"total_count" : 1
}
```

Status Code

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

Error Code

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

4.4.11 Configuring a Cross-Region Backup Policy

Function

This API is used to configure a cross-region backup policy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/backups/offsite-policy

Table 4-385 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-386 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-387 Request body parameter

Parameter	Mandatory	Type	Description
backup_policy	Yes	UpdateBackupOffsitePolicyInfo object	Definition Backup policy information. Constraints N/A

Table 4-388 UpdateBackupOffsitePolicyInfo

Parameter	Mandatory	Type	Description
open_auto_backup	Yes	Boolean	Definition Whether to enable cross-region full backup. Constraints N/A Range true: Cross-region full backup is enabled. false: Cross-region full backup is disabled. Default Value N/A

Parameter	Mandatory	Type	Description
open_incremental_backup	Yes	Boolean	Definition Whether to enable cross-region incremental backup. Constraints N/A Range • true: Cross-region incremental backup is enabled. This function can only be enabled when open_auto_backup is enabled. • false: Cross-region incremental backup is disabled. Default Value N/A
destination_project_id	Yes	String	Definition Target project ID for the cross-region backup policy. Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
destination_region	Yes	String	Definition Destination region for the cross-region backup policy. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
keep_days	Yes	Integer	Definition Backup retention days. Constraints N/A Range 1–1825 Default Value N/A

Response Parameters

Status code: 200

Table 4-389 Response body parameter

Parameter	Type	Description
result	String	Definition Update results. Range N/A

Status code: 400

Table 4-390 Response body parameters

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

Status code: 500

Table 4-391 Response body parameters

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

Example Request

Configuring a cross-region backup policy

```
PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/offsite-policy  
  
{  
  "backup_policy": {  
    "open_auto_backup": true,  
    "open_incremental_backup": false,  
    "destination_project_id": "fd710c89089a448aa2e666ab15817090",  
    "destination_region": "cn-north-7",  
    "keep_days": 1  
  }  
}
```

Example Response

Status code: 200

Success.

```
{  
  "result": "success"  
}
```

Status Code

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

Error Code

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

4.4.12 Restoring Tables to a Specified Point in Time

Function

This API is used to restore tables to a specified point in time. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/backups/restore/tables

Table 4-392 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-393 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-394 Request body parameters

Parameter	Mandatory	Type	Description
restore_time	Yes	String	Definition Backup time point. Constraints The value is a Unix timestamp in milliseconds and represents UTC time. When specifying the parameter, convert the local time from your relevant time zone to a UTC timestamp first. For example, for a time in the Beijing time zone (UTC +08:00), subtract 8 hours to get the UTC timestamp. Range To obtain this value, see Querying the Restoration Time Range . Default Value N/A
restore_tables	Yes	Array of CreateRestoreDatabaseTableInfo objects	Definition Database information. Constraints N/A
last_table_info	No	String	Definition Whether data is restored to the most recent table. Constraints N/A Range • true: most recent table • false: time-specific table Default Value false

Table 4-395 CreateRestoreDatabaseTableInfo

Parameter	Mandatory	Type	Description
database	Yes	String	Definition Database name. Constraints N/A Range The database name can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The total number of hyphens (-) cannot exceed 10. Default Value false
tables	Yes	Array of CreateRestoreTableInfo objects	Definition Table information. Constraints N/A

Table 4-396 CreateRestoreTableInfo

Parameter	Mandatory	Type	Description
old_name	Yes	String	Definition Table name before the restoration. Constraints N/A Range N/A Default Value false

Parameter	Mandatory	Type	Description
new_name	Yes	String	Definition Table name after the restoration. Constraints N/A Range N/A Default Value false

Response Parameters

Status code: 200

Table 4-397 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-398 Response body parameters

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

Status code: 500

Table 4-399 Response body parameters

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

Example Request

Restoring tables to a point in time

```
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/restore/tables
```

```
{  
  "restore_time" : 1690890940000,  
  "last_table_info" : true,  
  "restore_tables" : [ {  
    "database" : "test_db_1",  
    "tables" : [ {  
      "new_name" : "t3_1690899914000",  
      "old_name" : "t3"  
    } ]  
  } ]  
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "9c77973c-9332-4fbe-bb4d-b76760dbc9b2"  
}
```

Status Code

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

Error Code

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

4.4.13 Querying Available Tables for Table-level PITR

Function

This API is used to query available tables for table-level PITR. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
GET /v3.1/{project_id}/instances/{instance_id}/backups/restore/tables
```

Table 4-400 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-401 Query parameters

Parameter	Mandatory	Type	Description
restore_time	Yes	String	Definition Backup time point. Constraints The value is a Unix timestamp in milliseconds and represents UTC time. When specifying the parameter, convert the local time from your relevant time zone to a UTC timestamp first. For example, for a time in the Beijing time zone (UTC +08:00), subtract 8 hours to get the UTC timestamp. Range To obtain this value, see Querying the Restoration Time Range . Default Value N/A
last_table_info	Yes	String	Definition Whether data is restored to the most recent table. Constraints N/A Range • true: most recent table • false: time-specific table Default Value N/A
database_name	No	String	Definition Database name, which is used for fuzzy match. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
table_name	No	String	Definition Table name, which is used for fuzzy match. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-402 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-403 Response body parameters

Parameter	Type	Description
total_tables	Integer	Definition Total number of tables in an instance. Range N/A
databases	Array of RestoreDatabaseInfos objects	Definition Database information.

Table 4-404 RestoreDatabaseInfos

Parameter	Type	Description
name	String	Definition Database name. Range The database name can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The total number of hyphens (-) cannot exceed 10.
total_tables	Integer	Definition Total number of tables. Range N/A
tables	Array of RestoreDatabaseTableInfo objects	Definition Table information.

Table 4-405 RestoreDatabaseTableInfo

Parameter	Type	Description
name	String	Definition Table name. Range N/A

Status code: 400**Table 4-406** Response body parameters

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

Status code: 500**Table 4-407** Response body parameters

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

Example Request

Querying available tables for table-level PITR

```
GET https://{endpoint}/v3.1/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/restore/tables?  
database_name=test&last_table_info=true&restore_time=1690890940000&table_name=t
```

Example Response

Status code: 200

Success.

```
{  
  "total_tables": 1,  
  "databases": [{  
    "name": "test_db_1",  
    "total_tables": 1,  
    "tables": [{  
      "name": "t3"  
    }]  
  }]  
}
```

Status Code

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

Error Code

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

4.5 Parameter Template Management

4.5.1 Querying Parameter Templates

Function

This API is used to query parameter templates, including all databases' default and custom parameter templates. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/configurations

Table 4-408 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-409 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-410 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-411 Response body parameters

Parameter	Type	Description
configurations	Array of ConfigurationSummary objects	Definition Parameter template information.

Parameter	Type	Description
total_count	Integer	Definition Total number of parameter templates. Range ≥ 0

Table 4-412 ConfigurationSummary

Parameter	Type	Description
id	String	Definition Parameter template ID. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed.
name	String	Definition Parameter template name. Range N/A
datastore_version_name	String	Definition DB version. Range 8.0
datastore_name	String	Definition Database name. Range GaussDB(for MySQL)
created	String	Definition Time when the parameter template was created. The format is "yyyy-MM-ddTHH:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Parameter	Type	Description
updated	String	Definition Time when the parameter template was updated. The format is "yyyy-MM-ddTHH:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
user_defined	Boolean	Definition Whether the parameter template is a custom template. Range • false: The parameter template is a default template. • true: The parameter template is a custom template.
description	String	Definition Parameter template description. Range N/A

Status code: 400**Table 4-413** Response body parameters

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

Status code: 500**Table 4-414** Response body parameters

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

Example Request

Querying parameter templates

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/configurations
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 1,
  "configurations": [ {
    "id": "887ea0d1bb0843c49e8d8e5a09a95652pr07",
    "name": "configuration_test",
    "description": "configuration_test",
    "datastore_version_name": "8.0",
    "datastore_name": "GaussDB(for MySQL)",
    "created": "2019-05-15T11:53:34+0000",
    "updated": "2019-05-15T11:53:34+0000",
    "user_defined": true
  }, {
    "id": "3bc1e9cc0d34404b9225ed7a58fb284epr07",
    "name": "Default-GaussDBforMySQL",
    "description": "Default parameter template for GaussDBforMySQL",
    "datastore_version_name": "8.0",
    "datastore_name": "GaussDB(for MySQL)",
    "created": "2019-05-27T03:38:51+0000",
    "updated": "2019-05-27T03:38:51+0000",
    "user_defined": false
  } ]
}
```

Status Code

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

Error Code

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

4.5.2 Creating a Parameter Template

Function

This API is used to create a parameter template. The following information needs to be configured: template name, description, DB engine version, and parameter values. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

- This API is only available for cluster TaurusDB instances (dedicated edition).
- The name of the custom parameter template is case-sensitive and must be different from the name of an existing or a default parameter template.

- The value of **parameter_values** in the custom parameter template must be within the default value range of the specified database version.

URI

POST /v3/{project_id}/configurations

Table 4-415 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-416 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-417 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Parameter template name. Constraints N/A Range The template name can contain 1 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), underscores (_), and periods (.) are allowed. Default Value N/A
description	No	String	Definition Parameter template description. Constraints N/A Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value Empty

Parameter	Mandatory	Type	Description
parameter_values	No	Map<String,String>	Definition Mapping between parameter names and parameter values. You can specify parameter values based on a default parameter template. Constraints N/A
datastore	No	DatastoreResult object	Definition Database object.

Table 4-418 DatastoreResult

Parameter	Mandatory	Type	Description
type	Yes	String	Definition DB engine. Constraints N/A Range Only gaussdb-mysql is supported. Default Value N/A
version	Yes	String	Definition Database version. For details about how to obtain the version, see the name field returned in Querying Version Information About a DB Engine . Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-419 Response body parameter

Parameter	Type	Description
configurations	ConfigurationSummary2 object	Parameter template information.

Table 4-420 ConfigurationSummary2

Parameter	Type	Description
id	String	Definition Parameter template ID. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed.
name	String	Definition Parameter template name. Range The value is the same as the parameter template name in the request.
description	String	Definition Parameter template description. Range The value is the same as the parameter template description in the request.
datastore	DatastoreRes ult object	Definition Database object.
created	String	Definition Creation time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. Range N/A

Parameter	Type	Description
updated	String	Definition Update time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. Range N/A

Table 4-421 DatastoreResult

Parameter	Type	Description
type	String	Definition DB engine. Constraints N/A Range Only gaussdb-mysql is supported. Default Value N/A
version	String	Definition Database version. For details about how to obtain the version, see the name field returned in Querying Version Information About a DB Engine . Constraints N/A Range N/A Default Value N/A

Status code: 400**Table 4-422** Response body parameters

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

Status code: 500**Table 4-423** Response body parameters

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

Example Request

Creating a parameter template (There are up to 10 concurrent connections for the account.)

```
POST https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/configurations
{
  "name" : "myparameter",
  "description" : "parameter1",
  "datastore" : {
    "type" : "gaussdb-mysql",
    "version" : "8.0"
  },
  "parameter_values" : {
    "max_user_connections" : "10"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "configurations" : {
    "id" : "887ea0d1bb0843c49e8d8e5a09a95652pr07",
    "name" : "myparameter",
    "description" : "parameter1",
    "datastore" : {
      "type" : "gaussdb-mysql",
      "version" : "8.0"
    },
    "created" : "2022-05-15T11:53:34+0000",
    "updated" : "2022-05-15T11:53:34+0000"
  }
}
```

Status Code

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

Error Code

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

4.5.3 Deleting a Parameter Template

Function

This API is used to delete a specified parameter template. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

- This API is only available for TaurusDB.
- Default parameter templates cannot be deleted.

URI

DELETE /v3/{project_id}/configurations/{configuration_id}

Table 4-424 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
configuration_id	Yes	String	Definition Parameter template ID. To obtain this value, see Querying Parameter Templates . Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-425 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-426 Response body parameters

Parameter	Type	Description
configuration_id	String	Definition Parameter template ID. Range The value is the same as the parameter template ID in the request.
configuration_name	String	Definition Parameter template name. Range The template name can contain 1 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), underscores (_), and periods (.) are allowed.

Status code: 400

Table 4-427 Response body parameters

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

Status code: 500

Table 4-428 Response body parameters

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

Example Request

Deleting a parameter template

```
DELETE https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/configurations/43570e0de32e40c5a15f831aa5ce4176pr07
```

Example Response

Status code: 200

Success.

```
{
  "configuration_id" : "887ea0d1bb0843c49e8d8e5a09a95652pr07",
  "configuration_name" : "myparameter"
}
```

Status Code

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

Error Code

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

4.5.4 Obtaining Details About a Parameter Template

Function

This API is used to obtain parameter details of a specified parameter template. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is only available for cluster TaurusDB instances (dedicated edition).

URI

GET /v3/{project_id}/configurations/{configuration_id}

Table 4-429 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition Parameter template ID. Constraints N/A Range To obtain this value, see Querying Parameter Templates . Default Value N/A

Request Parameters

Table 4-430 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-431** Response body parameters

Parameter	Type	Description
configurations	ConfigurationSummary2 object	Definition Parameter template information.
parameter_values	Map<String,String>	Definition Mapping between parameter names and parameter values. You can specify parameter values based on a default parameter template.

Table 4-432 ConfigurationSummary2

Parameter	Type	Description
id	String	Definition Parameter template ID. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed.
name	String	Definition Parameter template name. Range The value is the same as the parameter template name in the request.
description	String	Definition Parameter template description. Range The value is the same as the parameter template description in the request.
datastore	DatastoreResult object	Definition Database object.
created	String	Definition Creation time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. Range N/A
updated	String	Definition Update time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. Range N/A

Table 4-433 DatastoreResult

Parameter	Type	Description
type	String	Definition DB engine. Constraints N/A Range Only gaussdb-mysql is supported. Default Value N/A
version	String	Definition Database version. For details about how to obtain the version, see the name field returned in Querying Version Information About a DB Engine . Constraints N/A Range N/A Default Value N/A

Status code: 400**Table 4-434** Response body parameters

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

Status code: 500**Table 4-435** Response body parameters

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

Example Request

Obtaining details about a parameter template

```
GET https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/  
7a8d539ba30f43adaf1b16d08b1df4bdpr07
```

Example Response

Status code: 200

Success.

```
{  
  "configurations" : {  
    "id" : "887ea0d1bb0843c49e8d8e5a09a95652pr07",  
    "name" : "myparameter",  
    "description" : "parameter1",  
    "datastore" : {  
      "type" : "gaussdb-mysql",  
      "version" : "8.0"  
    },  
    "created" : "2022-05-15T11:53:34+0000",  
    "updated" : "2022-05-15T11:53:34+0000"  
  },  
  "parameter_values" : {  
    "binlog_rows_query_log_events" : "OFF",  
    "mount_vip_when_failover" : "ON",  
    "log-bin" : "ON",  
    "gtid_mode" : "ON",  
    "enforce_gtid_consistency" : "ON",  
    "innodb_online_alter_log_max_size" : "134217728",  
    "binlog_gtid_simple_recovery" : "ON",  
    "max_user_connections" : "10"  
  }  
}
```

Status Code

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

Error Code

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

4.5.5 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. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

- This API is only available for cluster TaurusDB instances (dedicated edition).
- Default parameter templates cannot be modified.

- The name of the modified parameter template must be different from that of a default parameter template.
- The parameter values to be modified must be within the default value range of the specified database version.

URI

PUT /v3/{project_id}/configurations/{configuration_id}

Table 4-436 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition Parameter template ID. Constraints N/A Range To obtain this value, see Querying Parameter Templates . Default Value N/A

Request Parameters

Table 4-437 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-438 Request body parameters

Parameter	Mandatory	Type	Description
name	No	String	Definition Parameter template name. Constraints N/A Range The template name can contain 1 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), underscores (_), and periods (.) are allowed. The parameter template description, parameter name, and parameter value mapping cannot be empty at the same time. Default Value N/A
description	No	String	Definition Parameter template description. Constraints N/A Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value Empty
parameter_values	No	Map<String,String>	Definition Mapping between parameter names and parameter values. You can specify parameter values based on a default parameter template. If this parameter is not specified, the original parameter information is retained. Constraints N/A

Response Parameters

Status code: 200

Table 4-439 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying a parameter template. Range N/A

Status code: 400

Table 4-440 Response body parameters

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

Status code: 500

Table 4-441 Response body parameters

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

Example Request

Modifying parameters in a parameter template

```
PUT https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/7a8d539ba30f43adaf1b16d08b1df4bdpr07
{
  "parameter_values": {
    "max_user_connections": "4"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "f6cb21fe-186a-4931-b20d-764ced1f1f6b"
}
```

Status Code

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

Error Code

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

4.5.6 Applying a Parameter Template

Function

This API is used to apply a parameter template to a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/configurations/{configuration_id}/apply

Table 4-442 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
configuration_id	Yes	String	Definition Parameter template ID. To obtain this value, see Querying Parameter Templates . Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-443 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-444 Request body parameter

Parameter	Mandatory	Type	Description
instance_ids	Yes	Array of strings	Definition List of instance IDs. Constraints The list contains a maximum of 10 instance IDs.

Response Parameters

Status code: 200

Table 4-445 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for applying a parameter template. Range N/A

Status code: 400

Table 4-446 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 4-447 Response body parameters

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

Example Request

Applying a parameter template

```
PUT https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/7a8d539ba30f43adaf1b16d08b1df4bdpr07/apply
{
  "instance_ids": ["1c3f12d626824d4ca357104def25a455in07"]
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "bf26cf3c-d046-4080-bb45-f114be7afa5f"
}
```

Status Code

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

Error Code

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

4.5.7 Replicating a Parameter Template

Function

This API is used to replicate a parameter template. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/configurations/{configuration_id}/copy

Table 4-448 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition ID of a custom parameter template. Constraints N/A Range To obtain this value, see Querying Parameter Templates . After the request is processed, the value of id in the response body is the value of configuration_id . Enter the ID of the configuration whose user_defined is set to true . Default Value N/A

Request Parameters

Table 4-449 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-450 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Name of a parameter template generated after replication. Constraints N/A Range The template name can contain 1 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), underscores (_), and periods (.) are allowed. Default Value N/A
description	No	String	Definition Description of a parameter template generated after replication Constraints N/A Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: > <"&'= Default Value Empty

Response Parameters

Status code: 200

Table 4-451 Response body parameter

Parameter	Type	Description
configuration_id	String	Definition Parameter template ID. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed.

Status code: 400**Table 4-452** Response body parameters

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

Status code: 500**Table 4-453** Response body parameters

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

Example Request

Replicating a parameter template

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/a2069d40256f40078c52d90d6a91ee63pr07/copy
```

```
{
  "name" : "paramTemplate-new",
  "description" : "new-parameter-group"
}
```

Example Response

Status code: 200

Success.

```
{  
  "configuration_id": "7b4e07852bd54016906e89461b3182cdpr02"  
}
```

Status Code

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

Error Code

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

4.5.8 Comparing Parameter Templates

Function

This API is used to compare two parameter templates. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/configurations/comparison

Table 4-454 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-455 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-456 Request body parameters

Parameter	Mandatory	Type	Description
source_configuration_id	Yes	String	Definition ID of the source parameter template for comparison. Constraints N/A Range To obtain this value, see Querying Parameter Templates . After the request is processed, the value of id in the response body is the value of source_configuration_id . Default Value N/A
target_configuration_id	Yes	String	Definition ID of the target parameter template for comparison. Constraints N/A Range To obtain this value, see Querying Parameter Templates . After the request is processed, the value of id in the response body is the value of target_configuration_id . Default Value N/A

Response Parameters

Status code: 200

Table 4-457 Response body parameter

Parameter	Type	Description
differences	Array of ParamGroupParameterDifferences objects	Definition Differences between parameters.

Table 4-458 ParamGroupParameterDifferences

Parameter	Type	Description
parameter_name	String	Definition Parameter name. Range N/A
source_value	String	Definition Parameter value in the source parameter template. Range N/A
target_value	String	Definition Parameter value in the target parameter template. Range N/A

Status code: 400**Table 4-459** Response body parameters

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

Status code: 500

Table 4-460 Response body parameters

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

Example Request

Comparing parameter templates

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/comparison
{
  "source_configuration_id" : "a2069d40256f40078c52d90d6a91ee63pr07",
  "target_configuration_id" : "0cd8ef851dc4422f98e7717205ed13e6pr07"
}
```

Example Response

Status code: 200

Success.

```
{
  "differences" : [ {
    "parameter_name" : "innodb_purge_threads",
    "source_value" : 1,
    "target_value" : 4
  }, {
    "parameter_name" : "connect_timeout",
    "source_value" : 10,
    "target_value" : 20
  } ]
}
```

Status Code

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

Error Code

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

4.5.9 Querying Instances That a Parameter Template Can Be Applied To

Function

This API is used to query DB instances that a parameter template can be applied to. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/configurations/{configuration_id}/applicable-instances

Table 4-461 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition Parameter template ID. To obtain this value, see Querying Parameter Templates . Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed. Default Value N/A

Table 4-462 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100

Request Parameters

Table 4-463 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-464** Response body parameters

Parameter	Type	Description
instances	Array of ApplicableInstances objects	Definition Response body of instances that the parameter template can be applied to.

Parameter	Type	Description
total_count	Integer	Definition Number of instances that the parameter template can be applied to. Range N/A

Table 4-465 ApplicableInstances

Parameter	Type	Description
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.

Status code: 400**Table 4-466** Response body parameters

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

Status code: 500**Table 4-467** Response body parameters

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

Example Request

Querying instances that a template parameter template can be applied to

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/0c82974e2354466098d7b4b72e55129dpr07/applicable-instances
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 10,
  "instances": [ {
    "instance_id": "75e1935142974ca685357dc784626f22in07",
    "instance_name": "gauss-ff14-hll"
  }, {
    "instance_id": "cf72c31a689c40b7883c355a0bb5cc1din07",
    "instance_name": "tst-bbbnew"
  }, {
    "instance_id": "4a99fbae95df43648281cdd9e269c1c7in07",
    "instance_name": "gauss-62d8"
  }, {
    "instance_id": "fb6244dc9b1443b7ad0aae81283d5d28in07",
    "instance_name": "gauss-test-1"
  }, {
    "instance_id": "2260da7e105e485ebc9c060c1663d89ain07",
    "instance_name": "gauss-f4c6-cx"
  }, {
    "instance_id": "1cf7357f931448f89229de664c114d05in07",
    "instance_name": "gauss-wry-0710-3"
  }, {
    "instance_id": "5280b1a667d142378fe28816afb2e4b8in07",
    "instance_name": "taurus_WAkJSzVy"
  }, {
    "instance_id": "56c6924923804259a1b15b846c6b4bf1in07",
    "instance_name": "tck-update3"
  }, {
    "instance_id": "72a8f4287e04427985087795825fcddain07",
    "instance_name": "critBack"
  }, {
    "instance_id": "c5df1dec75ed48ab85fe52c72ba784bbin07",
    "instance_name": "gauss-f873-cx"
  }
]
}
```

Status Code

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

Error Code

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

4.5.10 Viewing Parameter Change History

Function

This API is used to view the parameter change history. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/configurations/{configuration_id}/modify-history

Table 4-468 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition Parameter template ID. Constraints It must be the ID of the parameter template corresponding to the instance. Range To obtain this value, see Querying Details of a DB Instance . After the request is processed, this parameter value is the value of configuration_id in the response body. Default Value N/A

Table 4-469 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-470 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-471** Response body parameters

Parameter	Type	Description
total_count	Integer	Definition Total number of modified parameters. Range N/A

Parameter	Type	Description
histories	Array of ParamGroupHistoryResponse objects	Definition Change history of the parameter template.

Table 4-472 ParamGroupHistoryResponse

Parameter	Type	Description
parameter_name	String	Definition Parameter name. Range N/A
old_value	String	Definition Old parameter value. Range N/A
new_value	String	Definition New parameter value. Range N/A
update_result	String	Definition Update results. Range N/A
is_applied	Boolean	Definition Whether the changed template is applied. Range • true: The changed template is applied. • false: The changed template is not applied.
updated	String	Definition Time when the template was modified. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Parameter	Type	Description
applied	String	Definition Time when the template was applied. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Status code: 400**Table 4-473** Response body parameters

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

Status code: 500**Table 4-474** Response body parameters

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

Example Request

Viewing parameter change history

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/  
7625c6a12d884be1891c61d921e0e114pr07/modify-history
```

Example Response

Status code: 200

Success.

```
{  
  "total_count" : 2,  
  "histories" : [ {  
    "parameter_name" : "binlog_rows_query_log_events",  
    "old_value" : false,
```

```
{
  "new_value" : true,
  "update_result" : "SUCCESS",
  "is_applied" : true,
  "updated" : "2023-07-10T02:14:28+0000",
  "applied" : "2023-07-10T02:14:28+0000"
}, {
  "parameter_name" : "block_encryption_mode",
  "old_value" : "aes-256-cbc",
  "new_value" : "aes-128-cfb1",
  "update_result" : "SUCCESS",
  "is_applied" : true,
  "updated" : "2023-07-10T02:14:28+0000",
  "applied" : "2023-07-10T02:14:28+0000"
}]
}
```

Status Code

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

Error Code

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

4.5.11 Obtaining Parameter Information of a Specified DB Instance

Function

This API is used to obtain parameter information of a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/configurations

Table 4-475 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-476 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100

Request Parameters

Table 4-477 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-478** Response body parameters

Parameter	Type	Description
configurations	ParameterConfigurationInfo object	Definition Instance parameter template information.

Parameter	Type	Description
total_count	Long	Definition Total number of instance parameters. Range ≥ 0
parameter_values	Array of ParameterValuesInfo objects	Definition Instance parameter information.

Table 4-479 ParameterConfigurationInfo

Parameter	Type	Description
datastore_version_name	String	Definition DB version name. Range 2.0
datastore_name	String	Definition DB engine name in the parameter template. Range taurus
created	String	Definition Time when the parameter template was created. The format is "yyyy-mm-ddThh:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Time when the parameter template was updated. The format is "yyyy-mm-ddThh:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Table 4-480 ParameterValuesInfo

Parameter	Type	Description
name	String	Definition Parameter name. Range N/A
value	String	Definition Parameter value. Range N/A
restart_required	Boolean	Definition Whether a reboot is required. Range • false: No • true: Yes
readonly	Boolean	Definition Whether the parameter is read-only. Range • false: No • true: Yes
value_range	String	Definition Value range. Range N/A
type	String	Definition Parameter type. Range • string • integer • boolean • list • float
description	String	Definition Parameter description. Range N/A

Status code: 400**Table 4-481** Response body parameters

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

Status code: 500**Table 4-482** Response body parameters

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

Example Request

Obtaining parameter information of a specified DB instance

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/configurations
```

Example Response

Status code: 200

Success.

```
{  
  "configurations" : {  
    "datastore_version_name" : 2.0,  
    "datastore_name" : "taurus",  
    "created" : "2022-10-29T09:38:36+0000",  
    "updated" : "2022-10-29T09:38:36+0000"  
  },  
  "total_count" : 125,  
  "parameter_values" : [ {  
    "name" : "auto_increment_increment",  
    "value" : 1,  
    "restart_required" : false,  
    "readonly" : false,  
    "value_range" : "1-65535",  
    "type" : "integer",  
    ...."description": auto_increment_increment and auto_increment_offset are used for master-to-master  
    replication and to control the operations of the AUTO_INCREMENT column.  
  }, {  
    "name" : "auto_increment_offset",  
    "value" : 1,  
    "restart_required" : false,  
    "readonly" : false,
```

```
"value_range" : "1-65535",
"type" : "integer",
...."description": auto_increment_increment and auto_increment_offset are used for master-to-master
replication and to control the operations of the AUTO_INCREMENT column.
} ]
}
```

Status Code

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

Error Code

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

4.5.12 Modifying Parameters of a Specified DB Instance

Function

This API is used to modify parameters of a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/configurations

Table 4-483 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-484 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-485 Request body parameter

Parameter	Mandatory	Type	Description
parameter_values	Yes	Map<String,String>	Definition Mapping between parameter names and parameter values. You can specify parameter values based on a default parameter template. If this parameter is not specified, the original parameter information is retained. Constraints N/A

Response Parameters

Status code: 200

Table 4-486 Response body parameters

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying parameters of a specified instance. Range N/A

Parameter	Type	Description
restart_required	Boolean	Definition Whether a reboot is required. Range • true: The instance needs to be rebooted. • false: The instance does not need to be rebooted.

Status code: 400**Table 4-487** Response body parameters

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

Status code: 500**Table 4-488** Response body parameters

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

Example Request

Modifying parameters of a specified DB instance

PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/3ef58db3986540d19f95151309368d34in07/configurations

```
{
  "parameter_values": {
    "max_user_connections": "100"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "e5d698a9-d8db-47d2-bf75-3c9018f72b6f",
}
```

```
"restart_required" : false
}
```

Status Code

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

Error Code

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

4.5.13 Replicating the Parameter Template of a DB Instance

Function

This API is used to replicate the parameter template of a DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/configurations/{configuration_id}/copy

Table 4-489 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
configuration_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-490 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-491 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Name of a parameter template generated after replication. Constraints N/A Range The template name can contain 1 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), underscores (_), and periods (.) are allowed. Default Value N/A
description	No	String	Definition Description of a parameter template generated after replication. Constraints N/A Range The description can consist of up to 256 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value It is left blank by default.

Response Parameters

Status code: 200

Table 4-492 Response body parameter

Parameter	Type	Description
configuration_id	String	Definition Parameter template ID. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed.

Status code: 400**Table 4-493** Response body parameters

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

Status code: 500**Table 4-494** Response body parameters

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

Example Request

Replicating the parameter template of a DB instance

```
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/61a4ea66210545909d74a05c27a7179ein07/configurations/b26ab68e7a77495c8d84b92e4eaa33d3pr07/copy
{
  "name" : "paramTemplate-test-1",
  "description" : "test"
}
```

Example Response

Status code: 200

Success.

```
{  
  "configuration_id" : "c82d8c54c4c7416a946f58d9ee89ed8epr07"  
}
```

Status Code

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

Error Code

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

4.5.14 Querying Application Records of a Parameter Template

Function

This API is used to query application records of a parameter template. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/configurations/{config_id}/apply-history

Table 4-495 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
config_id	Yes	String	Definition Parameter template ID. Constraints It must be the ID of the parameter template corresponding to the instance. Range The value contains 36 characters, starting with a UUID and ending with pr07 . Only letters and digits are allowed. To obtain this value, see Querying Details of a DB Instance . After the request is processed, this parameter value is the value of configuration_id in the response body. Default Value N/A

Table 4-496 Query parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0

Request Parameters

Table 4-497 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-498 Response body parameters

Parameter	Type	Description
total_count	String	Definition Number of application records of a parameter template. Range N/A
histories	Array of TemplateApplyHistory objects	Definition Application record information of a parameter template.

Table 4-499 TemplateApplyHistory

Parameter	Type	Description
target_id	String	Definition ID of the instance that the template is applied to. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
target_name	String	Definition Name of the instance that the template is applied to. Range Instance name corresponding to the instance ID
apply_result	String	Definition Application results. Range • SUCCESS: The parameter template is applied to the corresponding instance. • FAILED: The parameter template failed to be applied to the corresponding instance. • APPLYING: The parameter template is being applied to the corresponding instance.

Parameter	Type	Description
applied_at	Number	Definition Time when the template was applied. Range N/A
error_code	String	Definition Error code. Range N/A

Status code: 400

Table 4-500 Response body parameters

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

Status code: 500

Table 4-501 Response body parameters

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

Example Request

Querying application records of a parameter template

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/
b366363c95b04b0eac39e73ea2672ffep07/apply-history
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 1,
  "histories": [ {
    "target_id": "06789bdfbe414d78b9cef1b79d7d9680in07",
```

```
"target_name" : "gauss-11",  
"apply_result" : "SUCCESS",  
"applied_at" : 1712246191000,  
"error_code" : ""  
}]  
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.
500	Server error.

Error Code

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

4.6 Quota Management

4.6.1 Querying the Instance Quotas of a Tenant

Function

This API is used to query the resource quotas of a specified tenant. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/project-quotas

Table 4-502 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-503 Query parameter

Parameter	Mandatory	Type	Description
type	No	String	Definition Resource type used to filter quotas. Constraints N/A Range instance Default Value instance

Request Parameters

Table 4-504 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-505** Response body parameters

Parameter	Type	Description
quotas	project-quotas object	Definition Instance quota of a tenant.

Table 4-506 project-quotas

Parameter	Type	Description
resources	Array of resource objects	Definition Resource objects.

Table 4-507 resource

Parameter	Type	Description
type	String	Definition Quota of a specified type. Range instance
used	Integer	Definition Number of created resources. Range ≥ 0
quota	Integer	Definition Maximum resource quota. Range The instance quantity quota ranges from 0 to 100,000. The value -1 indicates no limit.

Status code: 400**Table 4-508** Response body parameters

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

Status code: 500**Table 4-509** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying the instance quotas of a tenant

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/project-quotas?type=instance
```

Example Response

Status code: 200

Success.

```
{
  "quotas": {
    "resources": [ {
      "type": "instance",
      "used": "4",
      "quota": 50
    } ]
  }
}
```

Status Code

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

Error Code

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

4.6.2 Querying the Resource Quotas of a Specified Enterprise Project

Function

This API is used to query the resource quotas of a specified enterprise project. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

```
GET /v3/{project_id}/quotas
```

Table 4-510 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-511 Query parameters

Parameter	Mandatory	Type	Description
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 100
enterprise_project_name	No	String	Definition Enterprise project name. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-512 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-513 Response body parameters

Parameter	Type	Description
quota_list	Array of quota objects	Definition Resource objects.
total_count	Integer	Definition Number of quota records. Range N/A

Table 4-514 quota

Parameter	Type	Description
enterprise_project_id	String	Definition Enterprise project ID. Range N/A
enterprise_project_name	String	Definition Enterprise project name. Range N/A

Parameter	Type	Description
instance_quota	Integer	Definition Instance quantity quota. The value -1 indicates no limit. Range N/A
vcpus_quota	Integer	Definition vCPU quota. The value -1 indicates no limit. Range N/A
ram_quota	Integer	Definition Memory quota, in GB. The value -1 indicates no limit. Range N/A
availability_instance_quota	Integer	Definition Remaining instance quota. The value -1 indicates no limit. Range N/A
availability_vcpus_quota	Integer	Definition Remaining vCPU quota. The value -1 indicates no limit. Range N/A
availability_ram_quota	Integer	Definition Remaining memory quota. The value -1 indicates no limit. Range N/A

Status code: 400

Table 4-515 Response body parameters

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

Status code: 500

Table 4-516 Response body parameters

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

Example Request

Querying resource quotas

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
```

Example Response

Status code: 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "enterprise_project_name": "default",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40,
    "availability_instance_quota": 1,
    "availability_vcpus_quota": 4,
    "availability_ram_quota": 8
  } ]
}
```

Status Code

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

Error Code

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

4.6.3 Configuring Resource Quotas for a Specified Enterprise Project

Function

This API is used to configure resource quotas for a specified enterprise project. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

POST /v3/{project_id}/quotas

Table 4-517 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-518 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-519 Request body parameters

Parameter	Mandatory	Type	Description
quota_list	Yes	Array of setQuota objects	Definition Resource objects. Constraints N/A

Table 4-520 setQuota

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_quota	No	Integer	Definition Instance quantity quota. Constraints N/A Range 0–100000 (If there are already instances created, this parameter value must be greater than the number of existing instances.) -1: no limit Default Value N/A
vcpus_quota	No	Integer	Definition vCPU quota. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the number of used vCPUs.) -1: no limit Default Value N/A
ram_quota	No	Integer	Definition Memory quota, in GB. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the used memory size.) -1: no limit Default Value N/A

Response Parameters

Status code: 200

Table 4-521 Response body parameters

Parameter	Type	Description
quota_list	Array of setQuota objects	Definition Resource objects. Constraints N/A

Table 4-522 setQuota

Parameter	Type	Description
enterprise_project_id	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_quota	Integer	Definition Instance quantity quota. Constraints N/A Range 0–100000 (If there are already instances created, this parameter value must be greater than the number of existing instances.) -1: no limit Default Value N/A

Parameter	Type	Description
vcpus_quota	Integer	Definition vCPU quota. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the number of used vCPUs.) -1: no limit Default Value N/A
ram_quota	Integer	Definition Memory quota, in GB. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the used memory size.) -1: no limit Default Value N/A

Example Request

Configuring resource quotas

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

Example Response

Status code: 200

Success.

```
{
  "quota_list": [ {
```



```
"enterprise_project_id" : "0",  
"instance_quota" : 20,  
"vcpu_quota" : 20,  
"ram_quota" : 40  
} ]  
}
```

Status Code

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

Error Code

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

4.6.4 Modifying the Resource Quotas of a Specified Enterprise Project

Function

This API is used to modify the resource quotas of a specified enterprise project. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

PUT /v3/{project_id}/quotas

Table 4-523 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-524 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-525 Request body parameters

Parameter	Mandatory	Type	Description
quota_list	Yes	Array of setQuota objects	Definition Resource objects. Constraints N/A

Table 4-526 setQuota

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_quota	No	Integer	Definition Instance quantity quota. Constraints N/A Range 0–100000 (If there are already instances created, this parameter value must be greater than the number of existing instances.) -1: no limit Default Value N/A
vcpus_quota	No	Integer	Definition vCPU quota. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the number of used vCPUs.) -1: no limit Default Value N/A
ram_quota	No	Integer	Definition Memory quota, in GB. Constraints N/A Range 0–2147483646 (If there are already instances created, this parameter value must be greater than the used memory size.) -1: no limit Default Value N/A

Response Parameters

Status code: 200

Table 4-527 Response body parameters

Parameter	Type	Description
quota_list	Array of setQuota objects	Definition Resource objects. Constraints N/A

Table 4-528 setQuota

Parameter	Type	Description
enterprise_project_id	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_quota	Integer	Definition Instance quantity quota. Constraints N/A Range 0–100000 (If there are already instances created, this parameter value must be greater than the number of existing instances.) -1: no limit Default Value N/A

Parameter	Type	Description
vcpus_quota	Integer	Definition vCPU quota. Constraints N/A Range 0-2147483646 (If there are already instances created, this parameter value must be greater than the number of used vCPUs.) -1: no limit Default Value N/A
ram_quota	Integer	Definition Memory quota, in GB. Constraints N/A Range 0-2147483646 (If there are already instances created, this parameter value must be greater than the used memory size.) -1: no limit Default Value N/A

Status code: 400**Table 4-529** Response body parameters

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

Status code: 500

Table 4-530 Response body parameters

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

Example Request

Modifying the resource quotas of a specified enterprise project

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

Example Response

Status code: 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

Status Code

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

Error Code

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

4.6.5 Querying Enterprise Projects

Function

This API is used to query enterprise projects. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/enterprise-projects

Table 4-531 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-532 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-533 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-534 Response body parameters

Parameter	Type	Description
enterprise_projects	Array of EnterpriseProjectItem objects	Definition Enterprise project information.
total_count	Integer	Definition Total number of enterprise projects. Range N/A

Table 4-535 EnterpriseProjectItem

Parameter	Type	Description
id	String	Definition Enterprise project ID. Range N/A
name	String	Definition Enterprise project name. Range N/A
description	String	Definition Enterprise project description. Range N/A
status	String	Definition Enterprise project status. Range 1: normal 0: abnormal

Parameter	Type	Description
created	String	Definition Creation time. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .
updated	String	Definition Update time. Range The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .

Status code: 400**Table 4-536** Response body parameters

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

Status code: 500**Table 4-537** Response body parameters

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

Example Request

Querying Enterprise Projects

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/enterprise-projects
```

Example Response

Status code: 200

Success.

```
{
  "total_count" : 4,
  "enterprise_projects" : [ {
    "id" : 0,
    "name" : "default",
    "description" : null,
    "status" : 1,
    "created" : null,
    "updated" : null
  }, {
    "id" : "5c7d11e0-3201-4558-bcce-1172137cf7e2",
    "name" : "sjw-eps",
    "description" : null,
    "status" : 1,
    "created" : "2023-06-12T02:14:28+0000",
    "updated" : "2023-06-12T02:14:28+0000"
  }, {
    "id" : "12093327-28dc-46c5-8ba6-d42c9236f9d6",
    "name" : "adf",
    "description" : null,
    "status" : 1,
    "created" : "2023-05-06T08:33:03+0000",
    "updated" : "2023-05-06T08:33:03+0000"
  }, {
    "id" : "07d90b3f-422b-40c9-b9b3-6d00d1d7a60b",
    "name" : "eps-test",
    "description" : null,
    "status" : 1,
    "created" : "2023-03-16T01:38:13+0000",
    "updated" : "2023-03-16T01:38:13+0000"
  } ]
}
```

Status Code

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

Error Code

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

4.7 Database Proxy

4.7.1 Creating a Proxy Instance

Function

This API is used to create a proxy instance in ELB mode. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy

Table 4-538 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-539 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-540 Request body parameters

Parameter	Mandatory	Type	Description
flavor_ref	Yes	String	Definition Specification code of the proxy instance. Constraints N/A Range To obtain this value, see the spec_code field returned in Querying Proxy Instance Specifications . Default Value N/A
node_num	Yes	Integer	Definition Number of proxy instance nodes. Constraints N/A Range 2–16 Default Value N/A
proxy_name	No	String	Definition Proxy instance name. Constraints Instances of the same type can have the same name under the same tenant. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
proxy_mode	No	String	Definition Proxy instance type. Constraints N/A Range • readwrite: read/write • readonly: read-only Default Value readwrite
route_mode	No	Integer	Definition Routing policy of the proxy instance. Constraints N/A Range • 0: weighted • 1: load balancing (The primary node does not process read requests.) • 2: load balancing (The primary node processes read requests.) Default Value 0
nodes_read_weight	No	Array of NodesWeight objects	Definition Read weights of database nodes. Constraints If proxy_mode is set to readonly , you can only assign weights for read replicas.

Parameter	Mandatory	Type	Description
subnet_id	No	String	Definition Subnet ID. You can obtain the value with either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: Query the subnet ID through the VPC API. For details, see Querying Subnets. Constraints N/A Range N/A Default Value N/A
new_node_auto_add_status	No	String	Definition Whether new nodes are automatically associated with proxy instances. Constraints N/A Range • ON: New nodes are automatically associated with proxy instances. • OFF: New nodes are not automatically associated with proxy instances. Default Value OFF

Parameter	Mandatory	Type	Description
new_node_weight	No	Integer	Definition Read weight of a new node. Constraints This parameter is mandatory when new_node_auto_add_status is set to ON . Range • If route_mode is 0 and new_node_auto_add_status is ON, the value of this parameter is between 0 and 1000. • If route_mode is not 0 and new_node_auto_add_status is OFF, this parameter is unavailable. Default Value N/A

Table 4-541 NodesWeight

Parameter	Mandatory	Type	Description
id	No	String	Definition Database node ID. Constraints The node ID must belong to the corresponding instance. Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
weight	No	Integer	Definition Node weight. Constraints N/A Range • route_mode set to 0: The value range is 0 to 1000. • route_mode set to 1: The value for the primary node is 0 and the value for read replicas is 0 or 1. • route_mode set to 2: The value for the primary node is 1 and the value for read replicas is 0 or 1.

Response Parameters

Status code: 201

Table 4-542 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-543 Response body parameters

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

Status code: 500

Table 4-544 Response body parameters

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

Example Request

Creating a proxy instance (The proxy instance specifications are 2 vCPUs and 8 GB memory, and the proxy mode is read-only)

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/43e4feaab48f11e89039fa163ebaa7e4br01/proxy
{
  "flavor_ref" : "gaussdb.proxy.large.x86.2",
  "node_num" : 2,
  "proxy_name" : "gaussdb-proxy",
  "proxy_mode" : "readonly",
  "route_mode" : 0,
  "nodes_read_weight" : [ {
    "id" : "45021bf73a244312a3f2af95092feecno07",
    "weight" : 50
  }, {
    "id" : "d78a65690cea4af5ad14585e110ff89bno07",
    "weight" : 400
  } ],
  "subnet_id" : "6991d82d-9166-4aff-a1fa-d2a8748b7084"
}
```

Example Response

Status code: 201

Success.

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

Status Code

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

Error Code

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

4.7.2 Deleting a Proxy Instance

Function

This API is used to delete a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/proxy

Table 4-545 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-546 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-547 Request body parameters

Parameter	Mandatory	Type	Description
proxy_ids	No	Array of strings	Definition Proxy instance IDs. Constraints If only one proxy instance is created, this parameter is not required. If multiple proxy instances are created, this parameter must be specified. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-548 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-549 Response body parameters

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

Status code: 500

Table 4-550 Response body parameters

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

Example Request

Deleting a specified proxy instance

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxy  
{  
  "proxy_ids" : [ "151c14381ac14ecfb9703a745b992677po01" ]  
}
```

Example Response

Status code: 200

Success.

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

Status Code

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

Error Code

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

4.7.3 Querying Proxy Instances

Function

This API is used to query proxy instances. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/proxies

Table 4-551 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-552 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100

Request Parameters

Table 4-553 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-554** Response body parameter

Parameter	Type	Description
proxy_list	Array of MysqlShowProxyResponse V3 objects	Definition Proxy instances.

Table 4-555 MysqlShowProxyResponseV3

Parameter	Type	Description
proxy	MysqlProxyV3 object	Definition Proxy instance information.
master_node	MysqlProxyNodeV3 object	Definition Primary node information.
readonly_nodes	Array of MysqlProxyNodeV3 objects	Definition Read replica information.

Table 4-556 MysqlProxyV3

Parameter	Type	Description
pool_id	String	Definition Proxy instance ID. Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed.

Parameter	Type	Description
status	String	Definition Status of a proxy instance. Range • ACTIVE: The proxy instance is normal. • FAILED: The proxy instance failed to be created. • DELETED: The proxy instance is deleted. • ABNORMAL: The proxy instance is abnormal. • ENABLING PROXY: The proxy instance is being created. • DISABLING PROXY: The proxy instance is being deleted. • ADDING PROXY NODE: Nodes are being added to the proxy instance. • DELETING READ REPLICAS FROM PROXY: Read replicas are being removed from the proxy instance. • ADDING READ REPLICAS TO PROXY: Read replicas are being added to the proxy instance. • CHANGING WEIGHTS: The weights of read replicas for the proxy instance are being changed.
address	String	Definition Proxy IP address. Range N/A
port	Integer	Definition Port of a proxy instance. Range N/A
pool_status	String	Definition Status of a proxy instance. Range • ACTIVE: The proxy instance is normal. • ABNORMAL: The proxy instance is abnormal. • FAILED: The proxy instance failed to be created. • DELETED: The proxy instance is deleted.

Parameter	Type	Description
delay_threshold_in_seconds	Integer	Definition Delay threshold in seconds. Range N/A
elb_vip	String	Definition Virtual IP address in ELB mode. Range N/A
eip	String	Definition EIP. Range N/A
vcpus	String	Definition vCPUs of a proxy instance. Range N/A
ram	String	Definition Memory size of a proxy instance. Range N/A
node_num	Integer	Definition Number of proxy instance nodes. Range N/A
mode	String	Definition Proxy instance mode. Range Cluster
nodes	Array of MysqlProxyNodes objects	Definition Database proxy nodes.
flavor_ref	String	Definition Proxy instance specifications. Range N/A

Parameter	Type	Description
name	String	Definition Proxy instance name. Range N/A
transaction_split	String	Definition Status of transaction splitting for the proxy instance. Range • true: enabled • false: disabled
connection_pool_type	String	Definition Connection pool type. Range • CLOSED: The connection pool is closed. • SESSION: The session-level connection pool is enabled.
switch_connection_pool_type_enabled	Boolean	Definition Whether the proxy instance version supports session-level connection pool. Range • true: supported • false: not supported
route_mode	Integer	Definition Routing policy of the proxy instance. Range • 0: weighted • 1: load balancing (The primary node does not process read requests.) • 2: load balancing (The primary node processes read requests.)
balance_route_mode_enabled	Boolean	Definition Whether the proxy instance version supports load balancing. Range • true: supported • false: not supported

Parameter	Type	Description
consistence_mode	String	Definition Consistency level. The parameter is left blank by default. Range • session: session consistency (Only this value can be used when session_consistence is true.) • global: global consistency (This value can be used when session_consistence is false.) • eventual: eventual consistency (This value can be used when session_consistence is false.)
subnet_id	String	Definition ID of the subnet that the proxy instance belongs to. Range N/A
ssl_option	String	Definition Whether to enable SSL. Range • true: SSL is enabled. • false: SSL is disabled.
new_node_auto_add_status	String	Definition Whether new nodes are automatically associated with proxy instances. Range • ON: New nodes are automatically associated with proxy instances. • OFF: New nodes are not automatically associated with proxy instances.
new_node_weight	Integer	Definition Read weight of a new node. Range 1-1000

Table 4-557 MysqlProxyNodes

Parameter	Type	Description
id	String	Definition Proxy node ID.
status	String	Definition Status of the proxy instance node. Range • ACTIVE: The node is normal. • ABNORMAL: The node is abnormal. • FAILED: The node fails. • DELETED: The node has been deleted.
name	String	Definition Name of the proxy instance node. Range N/A
role	String	Definition Role of the proxy instance node. Range • master: primary node • slave: read replica
az_code	String	Definition AZ. Range N/A
frozen_flag	Integer	Definition Whether the proxy instance node is frozen. Range • 0: unfrozen • 1: frozen • 2: deleted after being frozen

Table 4-558 MysqlProxyNodeV3

Parameter	Type	Description
id	String	Definition ID of the proxy instance node. Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed.
instance_id	String	Definition Instance ID, which uniquely identifies an instance. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
status	String	Definition Node status. Range ● ACTIVE: The node is normal. ● ABNORMAL: The node is abnormal. ● FAILED: The node fails. ● DELETED: The node has been deleted.
name	String	Definition Node name. Range N/A
weight	Integer	Definition Read weight of the node. Range 1-1000
availability_zone	Array of MysqlProxyAvailable objects	Definition AZ information.

Table 4-559 MysqlProxyAvailable

Parameter	Type	Description
code	String	Definition AZ code. Range N/A
description	String	Definition AZ description. Range N/A

Status code: 400**Table 4-560** Response body parameters

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

Status code: 500**Table 4-561** Response body parameters

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

Example Request

Querying proxy instances

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07/proxies?offset=0&limit=10
```

Example Response

Status code: 200

Success.

```
{  
  "proxy_list": [ {
```

```
"proxy" : {
  "pool_id" : "2e7cf21d14794bafab623a334efd9ad8po01",
  "status" : "ACTIVE",
  "address" : "192.168.125.69",
  "port" : 3306,
  "pool_status" : "ACTIVE",
  "delay_threshold_in_seconds" : 30,
  "elb_vip" : "192.168.125.60",
  "eip" : "192.168.125.50",
  "vcpus" : 4,
  "ram" : 8,
  "node_num" : 2,
  "mode" : "Cluster",
  "nodes" : [ {
    "id" : "db53a238a02240c49365e72e284a4890pn01",
    "name" : "PROXY-2e7cf21d14794bafab623a334efd9ad8po01_0",
    "role" : "master",
    "az_code" : "az1xahz",
    "status" : "ACTIVE",
    "frozen_flag" : 0
  } ],
  "name" : "proxy-name",

  "connection_pool_type" : "SESSION",
  "switch_connection_pool_type_enabled" : true ,
  "subnet_id" : "6991d82d-9166-4aff-a1fa-d2a8748b7084"
},
"master_node" : {
  "id" : "c01a5645eb2c4fb6a9373542f5366e50no07",
  "instance_id" : "7a871d6d494e4327ad2e326afb591108in07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node01",
  "weight" : 0,
  "availability_zone" : [{
    "code" : "az1",
    "description": "AZ1"
  }]
},
"readonly_nodes" : {
  "id" : "d23535333138462880bfa1838fdcfcd2no07",
  "instance_id" : "7a871d6d494e4327ad2e326afb591108in07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node02",
  "weight" : 100,
  "availability_zone" : [{
    "code" : "az1",
    "description": "AZ1"
  }]
}
}
```

Status Code

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

Error Code

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

4.7.4 Querying Proxy Instance Specifications

Function

This API is used to query proxy instance specifications. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/flavors

Table 4-562 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-563 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-564** Response body parameters

Parameter	Type	Description
proxy_flavor_groups	Array of MysqlProxyFlavorGroups objects	Definition Specification group information.

Table 4-565 MysqlProxyFlavorGroups

Parameter	Type	Description
group_type	String	Definition Specification group type. Range • x86 • arm
proxy_flavors	Array of MysqlProxyComputeFlavor objects	Definition Specification information.

Table 4-566 MysqlProxyComputeFlavor

Parameter	Type	Description
vcpus	String	Definition Number of vCPUs. Range N/A
ram	String	Definition Memory size, in GB. Range N/A
db_type	String	Definition Database type. Range N/A
id	String	Definition Specification ID of the proxy instance. Range N/A
spec_code	String	Definition Specification code of the proxy instance. Range N/A
az_status	Object	Definition AZ status. key indicates the AZ ID, and value indicates the specification status in the AZ.

Status code: 400**Table 4-567** Response body parameters

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

Status code: 500**Table 4-568** Response body parameters

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

Example Request

Querying proxy instance specifications

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxy/flavors
```

Example Response

Status code: 200

Success.

```
{  
  "proxy_flavor_groups": {  
    "group_type": "X86",  
    "proxy_flavors": {  
      "id": "19be4c5d-d363-3342-bdbc-0dd9dbf7fafa",  
      "spec_code": "gaussdb.proxy.large.x86.2",  
      "vcpus": 2,  
      "ram": 4,  
      "db_type": "Proxy",  
      "az_status": {  
        "az1": "normal"  
      }  
    }  
  }  
}
```

Status Code

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

Error Code

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

4.7.5 Adding Proxy Nodes

Function

This API is used to add proxy nodes. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/enlarge

Table 4-569 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-570 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-571 Request body parameters

Parameter	Mandatory	Type	Description
node_num	Yes	Integer	Definition Number of proxy nodes to be added. Constraints There are a maximum of 16 proxy nodes for a DB instance. Range 1-14 Default Value N/A

Parameter	Mandatory	Type	Description
proxy_id	No	String	Definition Proxy instance ID. Constraints If only one proxy instance is created, this parameter is not required. If multiple proxy instances are created, you must configure this parameter. Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Response Parameters

Status code: 201

Table 4-572 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-573 Response body parameters

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

Status code: 500

Table 4-574 Response body parameters

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

Example Request

Adding proxy nodes

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/enlarge
{
  "node_num" : 2,
  "proxy_id" : "151c14381ac14ecfb9703a745b992677po01"
}
```

Example Response

Status code: 201

Success.

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

Status Code

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

Error Code

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

4.7.6 Deleting Proxy Nodes

Function

This API is used to delete proxy nodes. Before calling this API: Proxy instances are unavailable for DB instances in a DeC.

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/reduce

Table 4-575 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-576 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-577 Request body parameter

Parameter	Mandatory	Type	Description
node_num	Yes	Integer	Definition Number of proxy nodes to be deleted. Constraints The value is an integer from 1 to 14. Range 1-14 Default Value N/A

Response Parameters

Status code: 201

Table 4-578 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-579 Response body parameters

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

Status code: 500

Table 4-580 Response body parameters

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

Example Request

Deleting proxy nodes

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/reduce
{
  "node_num" : 1
}
```

Example Response

Status code: 201

Success.

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

Status Code

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

Error Code

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

4.7.7 Changing the Specifications of a Proxy Instance

Function

This API is used to change the specifications of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/flavor

Table 4-581 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-582 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-583 Request body parameters

Parameter	Mandatory	Type	Description
flavor_ref	Yes	String	Definition ID of the new specifications. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-584 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-585 Response body parameters

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

Status code: 500

Table 4-586 Response body parameters

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

Example Request

Changing the specifications of a proxy instance to 4 vCPUs and 8 GB memory

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/flavor{
  "flavor_ref": "gaussdb.proxy.xlarge.arm.2"
}
```

Example Response

Status code: 200

Success.

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

Status Code

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

Error Code

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

4.7.8 Assigning Read Weights

Function

This API is used to assign read weights for nodes. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/weight

Table 4-587 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-588 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-589 Request body parameters

Parameter	Mandatory	Type	Description
master_weight	No	Integer	Definition Weight of the primary node. Constraints N/A Range 1-1000 Default Value N/A

Parameter	Mandatory	Type	Description
readonly_nodes	No	Array of TaurusModifyProxyWeightReadOnlyNode objects	Weight information of the read replicas.

Table 4-590 TaurusModifyProxyWeightReadOnlyNode

Parameter	Mandatory	Type	Description
id	No	String	Definition Read replica ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
weight	No	Integer	Definition Weight of the read replica. Constraints N/A Range 1-1000 Default Value N/A

Response Parameters

Status code: 200

Table 4-591 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400**Table 4-592** Response body parameters

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

Status code: 500**Table 4-593** Response body parameters

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

Example Request

Assigning the weight of the primary node to 100

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/weight
{
  "master_weight" : 100
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87c11411890"
}
```


Status Code

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

Error Code

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

4.7.9 Changing the Routing Policy of a Proxy Instance

Function

This API is used to change the routing policy of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/route-mode

Table 4-594 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range ID of the proxy instance associated with the instance. Default Value N/A

Request Parameters

Table 4-595 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-596 Request body parameters

Parameter	Mandatory	Type	Description
route_mode	Yes	Integer	Definition Routing policy of the proxy instance. Constraints N/A Range • 0: weighted • 1: load balancing (The primary node does not process read requests.) • 2: load balancing (The primary node processes read requests.) Default Value N/A
master_weight	No	Integer	Definition Weight of the primary node. Constraints The value range depends on the routing policy. Range • If the routing policy is 0, the value is between 0 and 1000. • If the routing policy is 1, the value is 0. • If the routing policy is 2, the value is 1. Default Value N/A
readonly_nodes	No	Array of ModifyProxyRouteModeWeightReadonlyNode objects	Definition Weight information of the read replicas. Constraints N/A

Parameter	Mandatory	Type	Description
new_node_auto_add_status	No	String	Definition Whether new nodes are automatically associated with proxy instances. Constraints N/A Range • ON: New nodes are automatically associated with proxy instances. • OFF: New nodes are not automatically associated with proxy instances. Default Value OFF
new_node_weight	No	Integer	Definition Read weight of a new node. Constraints The value range depends on the routing policy and whether new nodes are automatically associated. Range • If route_mode is 0 and new_node_auto_add_status is ON, the value of this parameter is between 0 and 1000. • If route_mode is not 0 and new_node_auto_add_status is OFF, this parameter is unavailable. Default Value N/A

Table 4-597 ModifyProxyRouteModeWeightReadOnlyNode

Parameter	Mandatory	Type	Description
id	Yes	String	Definition Read replica ID. Constraints N/A Range ID of a read replica in the instance. Default Value N/A
weight	Yes	Integer	Definition Weight of the read replica. Constraints The value depends on the routing policy. Range • If the routing policy is 0, the value is between 0 and 1000. • If the routing policy is 1 or 2, the value is 0 or 1. Default Value N/A

Response Parameters

Status code: 200

Table 4-598 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-599 Response body parameters

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

Status code: 500**Table 4-600** Response body parameters

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

Example Request

- Changing the routing policy of a proxy instance to 0
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-mode

```
{
  "route_mode": 0,
  "master_weight": 100,
  "readonly_nodes": {
    "id": "d23535333138462880bfa1838fdcfcd2no07",
    "weight": 200
  }
}
```
- Changing the routing policy of a proxy instance to 1
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-mode

```
{
  "route_mode": 1,
  "master_weight": 0,
  "readonly_nodes": {
    "id": "d23535333138462880bfa1838fdcfcd2no07",
    "weight": 1
  }
}
```
- Changing the routing policy of a proxy instance to 2
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-mode

```
{
  "route_mode": 2,
  "master_weight": 1,
  "readonly_nodes": {
    "id": "d23535333138462880bfa1838fdcfcd2no07",
    "weight": 0
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87c11411890"
}
```

Status Code

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

Error Code

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

4.7.10 Enabling or Disabling Transaction Splitting for a Proxy Instance

Function

This API is used to enable or disable transaction splitting for a proxy instance.
Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/transaction-split

Table 4-601 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-602 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-603 Request body parameters

Parameter	Mandatory	Type	Description
transaction_split	Yes	String	Definition Whether to enable or disable transaction splitting. Constraints N/A Range ON: Transaction splitting is enabled. OFF: Transaction splitting is disabled. Default Value N/A
proxy_id_list	Yes	Array of strings	Definition Proxy instances under a DB instance. Constraints N/A

Response Parameters

Status code: 200

Table 4-604 Response body parameter

Parameter	Type	Description
job_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-605** Response body parameters

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

Status code: 500**Table 4-606** Response body parameters

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

Example Request

Disabling transaction splitting for a proxy instance

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/6b030d160ac24eda9a5320fb38dc2d0ain07/proxy/transaction-split
{
  "transaction_split": "OFF",
  "proxy_id_list": [ "2a2060f2486e4a47934182d91a3b53d2po01" ]
}
```

Example Response

Status code: 200

success

```
{
  "job_id": "11921bf5-f286-45ee-ab35-12a3d4084c57"
}
```

Status Code

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

Error Code

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

4.7.11 Enabling or Disabling Automatic Association of New Nodes with Proxy Instances

Function

This API is used to enable or disable automatic association of new nodes with proxy instances. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/new-node-auto-add

Table 4-607 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-608 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-609 Request body parameters

Parameter	Mandatory	Type	Description
switch_status	Yes	String	Definition Whether new nodes are automatically associated with proxy instances. Constraints N/A Range • ON: New nodes are automatically associated with proxy instances. • OFF: New nodes are not automatically associated with proxy instances. Default Value N/A
weight	No	Integer	Definition Read weight of a new node. Constraints N/A Range • If switch_status is ON, the value ranges from 1 to 1000. • If switch_status is OFF, this parameter is unavailable. Default Value N/A

Response Parameters

Status code: 200

Table 4-610 Response body parameter

Parameter	Type	Description
result	String	Definition Results of enabling or disabling association of new nodes with proxy instances. Range N/A

Status code: 400**Table 4-611** Response body parameters

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

Status code: 500**Table 4-612** Response body parameters

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

Example Request

Automatically associating new nodes with proxy instances

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/new-node-
auto-add
{
  "switch_status": "ON",
  "weight": 100
}
```

Example Response

Status code: 200

Success.

```
{
  "result": "success"
}
```


Status Code

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

Error Code

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

4.7.12 Changing Session Consistency of a Proxy Instance

Function

This API is used to change the session consistency of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/session-consistence

Table 4-613 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-614 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-615 Request body parameters

Parameter	Mandatory	Type	Description
session_consistence	Yes	String	Definition Whether session consistency is enabled. Constraints N/A Range • true: Session consistency is enabled. • false: Session consistency is disabled. Default Value N/A
consistence_mode	No	String	Definition Consistency level. Constraints N/A Range • session: session consistency (Only this value can be used when session_consistence is true.) • global: global consistency (This value can be used when session_consistence is false.) • eventual: eventual consistency (This value can be used when session_consistence is false.) Default Value The parameter is left blank by default.

Response Parameters

Status code: 200

Table 4-616 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400**Table 4-617** Response body parameters

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

Status code: 500**Table 4-618** Response body parameters

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

Example Request

Enabling session consistency for a proxy instance

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
d512257ecca04d96a0f3a9021018a385in07/proxy/7bf4a8bbb4f4fb58233a242ee13603bpo01/session-  
consistence  
{  
  "session_consistence" : "true"  
}
```

Example Response

Status code: 200

Success

```
{  
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

Status Code

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

Error Code

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

4.7.13 Changing the Connection Pool Type of a Proxy Instance

Function

This API is used to change the connection pool type of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

This API is in the open beta test (OBT) phase. To use this API, submit a service ticket.

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/connection-pool-type

Table 4-619 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-620 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-621 Request body parameters

Parameter	Mandatory	Type	Description
connection_pool_type	Yes	String	Definition Connection pool type. Constraints N/A Range • CLOSED: The connection pool is closed. • SESSION: The session-level connection pool is enabled. Default Value N/A

Response Parameters

Status code: 200

Table 4-622 Response body parameters

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-623 Response body parameters

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

Status code: 500

Table 4-624 Response body parameters

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

Example Request

Enabling the session connection pool for a proxy instance

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/proxy/5881e1ca66af4aefbc64dc2874e55b3fpo01/connection-pool-type
{
  "connection_pool_type": "SESSION"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "a4217ac4-12cd-4fb3-acfc-db4a4a1896ea"
}
```

Status Code

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

Error Code

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

4.7.14 Changing the Port of a Proxy Instance

Function

This API is used to change the port of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/port

Table 4-625 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-626 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-627 Request body parameter

Parameter	Mandatory	Type	Description
port	Yes	Integer	Definition New port of the proxy instance. Constraints N/A Range 1025 to 65534, excluding 1033, 5342 to 5345, 12017, 20000, 20201, 20202, 33062, and 33071 Default Value N/A

Response Parameters

Status code: 200

Table 4-628 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for changing the port of a proxy instance. Range N/A

Status code: 400

Table 4-629 Response body parameters

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

Status code: 500

Table 4-630 Response body parameters

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

Example Request

Changing the port of a proxy instance

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/proxy/fbece38953e24a2b891488ed2fdf81abpo01/port
{
  "port" : 3308
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "*****"
}
```

Status Code

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

Error Code

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

4.7.15 Upgrading the Kernel Version of a Proxy Instance

Function

This API is used to upgrade the kernel version of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/upgrade-version

Table 4-631 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-632 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-633 Request body parameters

Parameter	Mandatory	Type	Description
source_version	Yes	String	Definition Source kernel version. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
target_version	Yes	String	Definition Target kernel version. Constraints The target kernel version must be later than or equal to the source kernel version. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-634 Response body parameter

Parameter	Type	Description
update_result	Array of ProxyUpgradeVersionDetail objects	Definition Proxy instance upgrade information.

Table 4-635 ProxyUpgradeVersionDetail

Parameter	Type	Description
instance_id	String	Definition Proxy instance ID. Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed.
workflow_id	String	Definition Workflow ID. Range N/A

Parameter	Type	Description
state	String	Definition Returned status. Range • ACCEPT: The task is accepted. • REJECT: The task is rejected.
error_message	String	Definition Error message. Range N/A

Status code: 400**Table 4-636** Response body parameters

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

Status code: 500**Table 4-637** Response body parameters

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

Example Request

Upgrading the kernel version of a proxy instance

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/517ea793ab91438cbfcd9c4b1c958b1ein07/proxy/0f46fc46396e4fb19a0cb52f578e9511po01/upgrade-version
{
  "source_version": "2.23.12.000",
  "target_version": "2.24.03.000"
}
```

Example Response**Status code: 200**

Success.

```
{
  "update_result": [ {
    "workflow_id": "375ac6a4-2788-4e45-83bf-8a9d2324317f",
    "state": "ACCEPT",
    "error_message": null
  }, {
    "workflow_id": "375ac6a4-2788-4e45-83be-8a9d2324327f",
    "state": "REJECT",
    "error_message": "Upgrade failed due to insufficient subnet ip"
  } ]
}
```

Status Code

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

Error Code

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

4.7.16 Changing the Name of a Proxy Instance

Function

This API is used to change the name of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/rename

Table 4-638 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-639 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-640 Request body parameter

Parameter	Mandatory	Type	Description
alias	Yes	String	Definition New name of the proxy instance. Constraints N/A Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Response Parameters

Status code: 200

Table 4-641 Response body parameter

Parameter	Type	Description
result	String	Definition Change results. Range N/A

Status code: 400

Table 4-642 Response body parameters

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

Status code: 500

Table 4-643 Response body parameters

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

Example Request

Changing the name of a proxy instance

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/rename
{
  "alias" : "newName"
}
```

Example Response

Status code: 200

Success.

```
{
  "result" : "success"
}
```

Status Code

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

Error Code

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

4.7.17 Querying Access Control Settings of a Proxy Instance

Function

This API is used to query access control settings of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/ipgroup

Table 4-644 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-645 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-646** Response body parameters

Parameter	Type	Description
enable_ip_group	Boolean	Definition Whether to enable access control. Range true: Access control is enabled. false: Access control is disabled.

Parameter	Type	Description
type	String	Definition Whitelist or blacklist. Range • white: whitelist • black: blacklist
ip_group	ProxyIpGroupDetail object	Definition Whitelist or blacklist details.

Table 4-647 ProxyIpGroupDetail

Parameter	Type	Description
id	String	Definition ID of an IP address group. Range N/A
name	String	Definition Name of an IP address group. Range N/A
ip_list	Array of IpGroupItem objects	Definition IP addresses in an IP address group.

Table 4-648 IpGroupItem

Parameter	Type	Description
ip	String	Definition IP address or CIDR block. Range N/A
description	String	Definition Description of the IP address. Range N/A

Status code: 400

Table 4-649 Response body parameters

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

Status code: 500**Table 4-650** Response body parameters

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

Example Request

Querying access control settings of a proxy instance

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/ipgroup
```

Example Response

Status code: 200

Success.

```
{  
  "enable_ip_group" : false,  
  "type" : "black",  
  "ip_group" : [ {  
    "id" : "a4217ac4-12cd-4fb3-acfc-db4a4a1896ea",  
    "name" : "PROXY-8c72c1b6985f414da0cfbc76ad7effc1po01_elblpGroup",  
    "ip_list" : [ {  
      "ip" : "192.127.0.1",  
      "description" : "proxy ipgroup"  
    }, {  
      "ip" : "192.127.0.2",  
      "description" : "proxy ipgroup"  
    } ]  
  } ]  
}
```

Status Code

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

Error Code

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

4.7.18 Querying the Minor Version of a Proxy Instance

Function

This API is used to query the minor version of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/{engine_name}/
proxy-version

Table 4-651 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
engine_name	Yes	String	Definition Read/Write splitting proxy of TaurusDB. Constraints N/A Range taurusproxy Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-652 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-653** Response body parameters

Parameter	Type	Description
current_version	String	Definition Current version of the proxy instance. Range N/A

Parameter	Type	Description
latest_version	String	Definition Latest version of the proxy instance. Range N/A
can_upgrade	Boolean	Definition Whether the proxy instance can be upgraded. Range • true: yes • false: no

Status code: 400

Table 4-654 Response body parameters

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

Status code: 500

Table 4-655 Response body parameters

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

Example Request

Querying the minor version of a proxy instance

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/taurusproxy/proxy-version
```

Example Response

Status code: 200

Success.

```
{  
  "current_version": "2.23.12.000",  
}
```

```
"latest_version" : "2.24.03.000",  
"can_upgrade" : true  
}
```

Status Code

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

Error Code

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

4.7.19 Modifying Parameters of a Proxy Instance

Function

This API is to modify parameters of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/configurations

Table 4-656 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07. Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-657 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-658 Request body parameter

Parameter	Mandatory	Type	Description
configurations	Yes	Array of UpdateProxyConfigurationItem objects	Definition Configurations to be modified. Constraints N/A

Table 4-659 UpdateProxyConfigurationItem

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Parameter name. Constraints N/A Range N/A Default Value N/A
value	Yes	String	Definition Parameter value. Constraints N/A Range N/A Default Value N/A
elem_type	Yes	String	Definition Parent tag type. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-660 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400**Table 4-661** Response body parameters

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

Status code: 500**Table 4-662** Response body parameters

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

Example Request

Modifying parameters of a proxy instance

```
PUT https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/configurations
{
  "configurations" : [ {
    "name" : "multiStatementType",
    "value" : "Loose",
    "elem_type" : "system"
  } ]
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "994cb0aa-9547-4271-bfc2-08f968276744"
}
```

Status Code

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

Error Code

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

4.7.20 Querying Kernel Parameters of a Proxy Instance

Function

This API is used to query kernel parameters of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/configurations

Table 4-663 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Table 4-664 Query parameter

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 100
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
name	No	String	Definition Parameter name. If this parameter is left empty, all parameters are queried. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-665 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-666 Response body parameters

Parameter	Type	Description
total_count	String	Definition Total number of records. Range N/A
configurations	Array of ProxyConfiguration objects	Definition Parameters that can be configured for the kernel.

Table 4-667 ProxyConfiguration

Parameter	Type	Description
name	String	Definition Parameter name. Range N/A
data_type	String	Definition Data type of the parameter. Range N/A

Parameter	Type	Description
elem_type	String	Definition Parent tag type of the parameter. Range N/A
value_range	String	Definition Parameter value range. Range N/A
value	String	Definition Default parameter value. Range N/A
description	String	Definition Parameter description. Range N/A

Status code: 400**Table 4-668** Response body parameters

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

Status code: 500**Table 4-669** Response body parameters

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

Example Request

Querying kernel parameters of a proxy instance

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/configurations
```

Example Response

Status code: 200

Success.

```
{  
  "total_count" : 1,  
  "configurations" : [ {  
    "name" : "slowLogQueryTime",  
    "data_type" : "integer",  
    "elem_type" : "system",  
    "value_range" : "200-50000",  
    "value" : 500,  
    "description" : "The default threshold for proxy slowLogQueryTime is 500 ms."  
  } ]  
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.
500	Server error.

Error Code

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

4.7.21 Enabling or Disabling Access Control

Function

This API is used to enable or disable access control. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/access-control-switch

Table 4-670 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-671 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-672 Request body parameter

Parameter	Mandatory	Type	Description
open_access_control	Yes	Boolean	Definition Whether to enable access control. Constraints N/A Range true: enabled false: disabled Default Value N/A

Response Parameters

Status code: 200

Table 4-673 Response body parameter

Parameter	Type	Description
open_access_control	Boolean	Definition Whether access control is enabled. Range • true: enabled • false: disabled

Status code: 400

Table 4-674 Response body parameters

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

Status code: 500

Table 4-675 Response body parameters

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

Example Request

- **Enabling access control**
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-control-switch

```
{
  "open_access_control" : true
}
```
- **Disabling access control**
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-

```
control-switch
{
  "open_access_control" : false
}
```

Example Response

Status code: 200

Success.

- Enabling access control

```
{
  "open_access_control" : true
}
```
- Disabling access control

```
{
  "open_access_control" : false
}
```

Status Code

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

Error Code

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

4.7.22 Configuring Access Control Rules

Function

This API is used to configure access control rules. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/access-control

Table 4-676 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-677 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-678 Request body parameters

Parameter	Mandatory	Type	Description
type	Yes	String	Definition Access control method. Constraints N/A Range • white: whitelist • black: blacklist Default Value N/A

Parameter	Mandatory	Type	Description
ip_list	Yes	Array of AccessControlRule objects	Definition Array of IP addresses that control access. Constraints A maximum of 300 IP addresses or CIDR blocks can be added. Range N/A Default Value N/A

Table 4-679 AccessControlRule

Parameter	Mandatory	Type	Description
ip	Yes	String	Definition IP address or CIDR block. Default Value N/A
description	No	String	Definition Remarks. Range Character length: 0-50. Angle brackets (<>) are not allowed.

Response Parameters

Status code: 200

Table 4-680 Response body parameter

Parameter	Type	Description
open_access_control	Boolean	Definition Whether access control is enabled. Range • true: enabled • false: disabled

Status code: 400**Table 4-681** Response body parameters

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

Status code: 500**Table 4-682** Response body parameters

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

Example Request

Configuring access control rules

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-control
{
  "type" : "black",
  "ip_list" : [ {
    "ip" : "192.107.0.1",
    "description" : "black01"
  } ]
}
```

Example Response

Status code: 200

Success.

```
{
  "open_access_control" : false
}
```

Status Code

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

Error Code

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

4.7.23 Enabling or Disabling SSL for a Proxy Instance

Function

This API is used to enable or disable SSL for a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/ssl

Table 4-683 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-684 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-685 Request body parameter

Parameter	Mandatory	Type	Description
ssl_option	Yes	Boolean	Definition Whether to enable SSL. Constraints N/A Range • true: SSL is enabled. • false: SSL is disabled. Default Value N/A

Response Parameters

Status code: 200

Table 4-686 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-687 Response body parameters

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

Status code: 500**Table 4-688** Response body parameters

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

Example Request

Enabling SSL

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/proxyId/2ec617ba62da4eafb921b69438beed3cpo01/ssl
{
  "ssl_option" : true
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

Status Code

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

Error Code

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

4.7.24 Rebooting a Proxy Instance

Function

This API is used to reboot a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/restart

Table 4-689 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-690 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-691 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-692 Response body parameters

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

Status code: 500

Table 4-693 Response body parameters

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

Example Request

Rebooting a proxy instance

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/restart
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "dff1d289-4d03-4942-854f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.7.25 Querying Proxy Instance Specifications by AZ

Function

This API is used to query proxy instance specifications by AZ. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/proxy/flavors

Table 4-694 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-695 Query parameters

Parameter	Mandatory	Type	Description
az_codes	Yes	String	Definition AZs. Constraints N/A Range N/A Default Value N/A
proxy_engine_name	Yes	String	Definition Proxy engine name. Constraints N/A Range taurusproxy Default Value N/A

Request Parameters

Table 4-696 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-697 Response body parameter

Parameter	Type	Description
proxy_flavor_groups	Array of ProxyFlavorGroup objects	Definition Proxy specification groups.

Table 4-698 ProxyFlavorGroup

Parameter	Type	Description
group_type	String	Definition Specification group type. Range N/A
proxy_flavors	Array of ProxyFlavor objects	Definition Specification list.

Table 4-699 ProxyFlavor

Parameter	Type	Description
spec_code	String	Definition Specification code. Range N/A
vcpus	String	Definition Number of vCPUs. Range N/A
ram	String	Definition Memory. Range N/A
db_type	String	Definition Database type. Range N/A
az_status	Object	Definition AZ status.
supported_ipv6	Boolean	Definition Whether IPv6 is supported. Range • true: IPv6 is supported. • false: IPv6 is not supported.

Status code: 400**Table 4-700** Response body parameters

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

Status code: 500

Table 4-701 Response body parameters

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

Example Request

Querying proxy instance specifications by AZ

```
GET https://{endpoint}/v3/04f70afb5080d24e2f9cc0128f1d5ebf/proxy/flavors?az_codes=cn-north-7c&proxy_engine_name=taurusproxy
```

Example Response

Status code: 200

Success.

```
{
  "proxy_flavor_groups": [ {
    "group_type": "x86",
    "proxy_flavors": [ {
      "id": "2058dfba-58aa-4869-833b-8a0717c7d06f",
      "spec_code": "gaussdb.proxy.large.x86.2",
      "vcpus": "2",
      "ram": "4",
      "db_type": "Proxy",
      "az_status": {
        "cn-north-7c": "normal"
      },
      "supported_ipv6": false
    }, {
      "id": "ad903fda-ee54-4ad6-87e6-23000c21de78",
      "spec_code": "gaussdb.proxy.xlarge.x86.2",
      "vcpus": "4",
      "ram": "8",
      "db_type": "Proxy",
      "az_status": {
        "cn-north-7c": "normal"
      },
      "supported_ipv6": false
    }
  ]
}
```

Status Code

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

Error Code

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

4.7.26 Applying for a Private Domain Name for a Proxy Instance

Function

This API is used to apply for a private domain name for a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/dns

Table 4-702 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-703 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 202

Table 4-704 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-705 Response body parameters

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

Status code: 500

Table 4-706 Response body parameters

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

Example Request

Applying for a private domain name for a proxy instance

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/dns
```

Example Response

Status code: 202

Success.

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

Status Code

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

Error Code

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

4.7.27 Changing the Private Domain Name of a Proxy Instance

Function

This API is used to change the private domain name of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/dns

Table 4-707 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-708 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-709 Request body parameters

Parameter	Mandatory	Type	Description
new_dns_name	Yes	String	Definition New domain name. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
vpc_id	Yes	String	Definition VPC ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and view the VPC ID in the VPC details. • Method 2: Query the VPC ID through the VPC API. For details, see Querying VPCs. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 202

Table 4-710 Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-711 Response body parameters

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

Status code: 500

Table 4-712 Response body parameters

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

Example Request

Changing the private domain name of a proxy instance

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/dns
{
  "new_dns_name" : "dns_name",
  "vpc_id" : "d5a1a29b-1476-490f-9682-c1a59593e7b0"
}
```

Example Response

Status code: 202

Success.

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

Status Code

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

Error Code

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

4.7.28 Deleting the Private Domain Name of a Proxy Instance

Function

This API is used to delete the private domain name of a proxy instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/dns

Table 4-713 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
proxy_id	Yes	String	Definition Proxy instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of po01 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-714 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 202**Table 4-715** Response body parameter

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A

Status code: 400

Table 4-716 Response body parameters

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

Status code: 500**Table 4-717** Response body parameters

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

Example Request

Deleting the private domain name of a proxy instance

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/dns
```

Example Response

Status code: 202

Success.

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

Status Code

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

Error Code

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

4.8 Log Management

4.8.1 Enabling or Disabling SQL Explorer

Function

This API is used to enable or disable SQL Explorer. If SQL Explorer is disabled, SQL Explorer may become unavailable for DAS and DBSS. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instance/{instance_id}/audit-log/switch

Table 4-718 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-719 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-720 Request body parameter

Parameter	Mandatory	Type	Description
switch_status	Yes	String	Definition Whether SQL Explorer is enabled. Constraints N/A Range ON: enabled OFF: disabled Default Value N/A

Response Parameters

Status code: 200

Table 4-721 Response body parameter

Parameter	Type	Description
result	String	Definition Results for enabling or disabling SQL Explorer. Range N/A

Status code: 400

Table 4-722 Response body parameters

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

Status code: 500

Table 4-723 Response body parameters

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

Example Request

Enabling SQL Explorer

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/61a4ea66210545909d74a05c27a7179ein07/audit-log/status
{
  "switch_status": "ON"
}
```

Example Response

Status code: 200

Success.

```
{  
  "result" : "success"  
}
```

Status Code

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

Error Code

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

4.8.2 Querying Whether SQL Explorer Is Enabled

Function

This API is used to query whether SQL Explorer is enabled. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instance/{instance_id}/audit-log/switch-status

Table 4-724 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-725 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-726 Response body parameter

Parameter	Type	Description
switch_status	String	Definition Whether SQL Explorer is enabled. Range ON: enabled OFF: disabled

Status code: 400

Table 4-727 Response body parameters

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

Status code: 500

Table 4-728 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying whether SQL Explorer is enabled

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/61a4ea66210545909d74a05c27a7179ein07/audit-log/switch-status
```

Example Response

Status code: 200

Success.

```
{
  "switch_status": "ON"
}
```

Status Code

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

Error Code

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

4.8.3 Querying Slow Query Logs

Function

This API is used to query slow query logs of a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3.1/{project_id}/instances/{instance_id}/slow-logs

Table 4-729 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-730 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-731 Request body parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
start_time	Yes	String	Definition Start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Constraints N/A Range The time is earlier than the current time. Default Value N/A

Parameter	Mandatory	Type	Description
end_time	Yes	String	Definition End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Constraints N/A Range The time is later than the start time and earlier than the current time. Default Value N/A
limit	Yes	Integer	Definition Number of records to be queried. Constraints N/A Range 1-5000 Default Value N/A
line_num	No	String	Definition Sequence number of a log event. This parameter is not required for the first query, but is required for subsequent pagination queries. The value can be obtained from the response of the last query. Constraints N/A Range The value is a string of 13 digits. Default Value N/A

Parameter	Mandatory	Type	Description
operate_type	No	String	Definition SQL statement type. Constraints N/A Range If this parameter is left blank or set to ALL , all statement types are queried. You can also specify the following log types: • INSERT • UPDATE • SELECT • DELETE • ALTER • DROP • CREATE Default Value N/A
database	No	String	Definition Database that slow query logs belong to. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-732 Response body parameter

Parameter	Type	Description
slow_log_list	Array of LtsLogSlowDetail objects	Definition Slow query logs.

Table 4-733 LtsLogSlowDetail

Parameter	Type	Description
node_id	String	Definition Node ID. Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed.
count	String	Definition Number of executions. Range N/A
time	String	Definition Execution time. Range N/A
lock_time	String	Definition Lock wait time. Range N/A
rows_sent	String	Definition Number of sent rows. Range N/A
rows_examined	String	Definition Number of scanned rows. Range N/A
database	String	Definition Database that slow query logs belong to. Range gaussdb-mysql
users	String	Definition Account name. Range N/A

Parameter	Type	Description
query_sample	String	Definition Execution syntax. Range N/A
type	String	Definition Statement type. Range • INSERT • UPDATE • SELECT • DELETE • ALTER • DROP • CREATE
start_time	String	Definition Start time in the UTC format. Range N/A
client_ip	String	Definition IP address. Range N/A
line_num	String	Definition Sequence number of a log event. Range N/A

Status code: 400**Table 4-734** Response body parameters

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

Status code: 500

Table 4-735 Response body parameters

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

Example Request

Querying slow query logs

```
POST https://{endpoint}/v3.1/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/slow-logs
{
  "start_time": "2022-11-20T00:00:00+0800",
  "end_time": "2022-11-29T00:00:00+0800",
  "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
  "limit": 10,
  "line_num": 1669344916000
}
```

Example Response

Status code: 200

Success.

```
{
  "slow_log_list": [ {
    "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
    "count": 1,
    "time": "1.04899 s",
    "lock_time": "0.00003 s",
    "rows_sent": 0,
    "rows_examined": 0,
    "database": "gaussdb-mysql",
    "users": "root",
    "query_sample": "INSERT INTO time_zone_name (Name, Time_zone_id) VALUES (N @time_zone_id);",
    "type": "INSERT",
    "start_time": "2022-11-25T10:55:16.000",
    "client_ip": "192.*.*.1",
    "line_num": 1669344916000
  } ]
}
```

Status Code

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

Error Code

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

4.8.4 Querying Error Logs

Function

This API is used to query error logs of a specified DB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3.1/{project_id}/instances/{instance_id}/error-logs

Table 4-736 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-737 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-738 Request body parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Node ID.

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Start time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A Default Value N/A
end_time	Yes	String	Definition End time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A Default Value N/A
limit	Yes	Integer	Definition Number of records to be queried. Constraints N/A Range < 5000 Default Value N/A

Parameter	Mandatory	Type	Description
line_num	No	String	Definition Sequence number of a log event. Constraints This parameter is not required for the first query, but is required for subsequent pagination queries. The value can be obtained from the response of the last query. Range N/A Default Value N/A
level	No	String	Definition Log level. Constraints N/A Range • ALL • INFO • WARNING • ERROR • FATAL • PANIC • NOTE Default Value ALL

Response Parameters

Status code: 200

Table 4-739 Response body parameter

Parameter	Type	Description
error_log_list	Array of LtsLogErrorDetail objects	Definition Error logs.

Table 4-740 LtsLogErrorDetail

Parameter	Type	Description
node_id	String	Definition Node ID. Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed.
time	String	Definition Execution time. Range N/A
level	String	Definition Log level. Range N/A
content	String	Definition Error log content. Range N/A
line_num	String	Definition Sequence number of a log event. Range N/A

Status code: 400**Table 4-741** Response body parameters

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

Status code: 500

Table 4-742 Response body parameters

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

Example Request

Querying error logs

```
POST https://{endpoint}/v3.1/056538411200d4cd2f79c003c7606412/instances/096c0fc43e804757b59946b80dc27f8bin07/error-logs
{
  "start_time" : "2022-11-20T00:00:00+0800",
  "end_time" : "2022-11-29T00:00:00+0800",
  "node_id" : "cc07c60e94ec4575989840e648fb4f66no07",
  "limit" : 10,
  "line_num" : 1669344916000
}
```

Example Response

Status code: 200

Success.

```
{
  "error_log_list" : [ {
    "node_id" : "cc07c60e94ec4575989840e648fb4f66no07",
    "time" : "2022-11-25T10:55:16.000",
    "level" : "ERROR",
    "content" : "[MY013508] [Repl] do failed: 1",
    "line_num" : 1669344916000
  } ]
}
```

Status Code

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

Error Code

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

4.8.5 Obtaining the Temporary Link for Downloading Full SQL

Function

This API is used to obtain the temporary link for downloading full SQL. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instance/{instance_id}/auditlog/download-link

Table 4-743 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-744 Query parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Start time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range The time cannot be earlier than the instance creation time. Default Value N/A
end_time	Yes	String	Definition End time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range The time cannot be later than the current time. Default Value N/A

Parameter	Mandatory	Type	Description
node_id	No	String	Definition Node ID. Constraints • If this parameter is specified, the link is only used for downloading full SQL of the node. • If this parameter is not specified, the link is used for downloading full SQL of all nodes of the instance. Range The value contains 36 characters, starting with a UUID and ending with no07. Only letters and digits are allowed. Default Value N/A
last_file_name	No	String	Definition Name of the last file queried last time. Constraints • If this parameter is specified, the query starts from the file name in alphabetical order. • If this parameter is not specified, the query starts from the first file. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of files returned in one query. Constraints N/A Range 1–50 Default Value 10

Request Parameters

Table 4-745 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-746 Response body parameter

Parameter	Type	Description
files	Array of FileInfo objects	Definition Obtained full SQL file information.

Table 4-747 FileInfo

Parameter	Type	Description
name	String	Definition File name. Range N/A
size	Long	Definition File size, in KB. Range N/A
updated_time	String	Definition Last modification time of the SQL file. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
download_link	String	Definition Link for downloading the file. Range N/A

Parameter	Type	Description
link_expired_time	String	Definition Link expiration time. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Status code: 400

Table 4-748 Response body parameters

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

Status code: 500

Table 4-749 Response body parameters

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

Example Request

Obtaining the temporary link for downloading full SQL

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/669a94abef9f4979b2dfba92f48f4042in07/auditlog/download-link?node_id=2e723b45786148fc94c8737f5980786cno07&last_file_name=20230724160316_99b1d48896bb44178b715d64b68603f9in07_6a21d5df9bb24f5db83121c5fec0b1d2no07_SQLAudit_8b4b53d2-29f8-11ee-92aa-fa163ef00f0d&limit=10&start_time=2023-07-24T09:27:00+0800&end_time=2023-07-25T15:00:14+0800
```

Example Response

Status code: 200

Success.

```
{  
  "files" : [ {
```

```
"name" :  
"20230706023359_669a94abef9f4979b2dfba92f48f4042in07_b051c8f7b98f4deeaf88ba97c8daba9dno07_SQLAudit_903bdbb6-1ba5-11ee-8b97-fa163ef0f8c2",  
"size" : 928,  
"updated_time" : "2023-07-06T02:43:57+0800",  
"download_link" : "https://obs.obs.domainname.com/bucketname/userid_instanceid/20230706/SQLAudit/xxxxxx",  
"link_expired_time" : "2023-07-13T012:30:36+0800"  
} ]  
}
```

Status Code

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

Error Code

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

4.8.6 Querying LTS Configurations of an Instance

Function

This API is used to query LTS configurations of an instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/logs/lts-configs

Table 4-750 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-751 Query parameters

Parameter	Mandatory	Type	Description
enterprise_project_id	No	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	No	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
instance_name	No	String	Definition Instance name. Constraints N/A Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0

Request Parameters

Table 4-752 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-753 Response body parameters

Parameter	Type	Description
instance_lts_configs	Array of LtsConfigsV3 objects	Definition LTS configurations of an instance.
total_count	Integer	Definition Total number of LTS configurations. Range N/A

Table 4-754 LtsConfigsV3

Parameter	Type	Description
lts_configs	Array of LtsConfig objects	Definition LTS configurations.
instance	InstanceLtsBasicInfo object	Definition Instance information.

Table 4-755 LtsConfig

Parameter	Type	Description
log_type	String	Definition Log type. Range • error_log: error logs • slow_log: slow query logs
lts_group_id	String	Definition Log group ID. Range N/A
lts_stream_id	String	Definition Log stream ID. Range N/A

Parameter	Type	Description
enabled	Boolean	Definition Whether LTS configurations are enabled. Range N/A

Table 4-756 InstanceLtsBasicInfo

Parameter	Type	Description
id	String	Definition Instance ID. Range N/A
name	String	Definition Instance name. Range N/A
mode	String	Definition Instance type. Range N/A
engine_name	String	Definition Engine name. Range N/A
engine_version	String	Definition Engine version. Range N/A
status	String	Definition Status. Range N/A
enterprise_project_id	String	Definition Enterprise project ID. Range N/A

Parameter	Type	Description
enterprise_project_name	String	Definition Enterprise project name. Range N/A

Status code: 400

Table 4-757 Response body parameters

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

Status code: 500

Table 4-758 Response body parameters

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

Example Request

Querying LTS configurations of an instance

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663//logs/lts-configs
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 1,
  "instance_lts_configs": [ {
    "lts_configs": [ {
      "log_type": "error_log",
      "lts_group_id": "c3dd5233-24a1-443c-6b40-310b3ad85382",
      "lts_stream_id": "9b476e31-b745-4e76-8d78-2081168651f7",
      "enabled": true
    } ],
    "instance": {
      "id": "61a4ea66210545909d74a05c27a7179ein07",
      "name": "gaussdb-mysql-instance01",
      "mode": "ha",

```

```
"engine_name" : "gaussdb-mysql",
"engine_version" : 2.0,
"status" : "normal",
"enterprise_project_id" : 0,
"enterprise_project_name" : "eps"
}
}]
}
```

Status Code

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

Error Code

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

4.8.7 Deleting LTS Configurations in Batches

Function

This API is used to delete LTS configurations in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/logs/lts-configs

Table 4-759 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-760 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-761 Request body parameter

Parameter	Mandatory	Type	Description
log_configs	Yes	Array of InstanceDeleteLtsConfig objects	Definition Log configurations. Constraints N/A

Table 4-762 InstanceDeleteLtsConfig

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
log_type	Yes	String	Definition Log type. Constraints N/A Range error_log: error logs slow_log: slow query logs Default Value N/A

Response Parameters

Status code: 200
Success.

Status code: 400

Table 4-763 Response body parameters

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

Status code: 500**Table 4-764** Response body parameters

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

Example Request

Deleting LTS configurations in batches

```
DELETE https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/logs/lts-configs
{
  "log_configs": [ {
    "instance_id": "61a4ea66210545909d74a05c27a7179ein07",
    "log_type": "error_log"
  } ]
}
```

Example Response

None

Status Code

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

Error Code

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

4.8.8 Creating LTS Configurations in Batches

Function

This API is used to create LTS configurations in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/logs/lts-configs

Table 4-765 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-766 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-767 Request body parameter

Parameter	Mandatory	Type	Description
log_configs	Yes	Array of InstanceSaveLtsConfig objects	Definition Log configurations. Constraints N/A

Table 4-768 InstanceSaveLtsConfig

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
log_type	Yes	String	Definition Log type. Constraints N/A Range • error_log: error logs • slow_log: slow query logs Default Value N/A
lts_group_id	Yes	String	Definition Log group ID. Constraints N/A Range N/A Default Value N/A
lts_stream_id	Yes	String	Definition Log stream ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-769 Response body parameters

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

Status code: 500

Table 4-770 Response body parameters

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

Example Request

Creating LTS configurations in batches

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/logs/lts-configs
{
  "log_configs": [ {
    "instance_id": "61a4ea66210545909d74a05c27a7179ein07",
    "log_type": "error_log",
    "lts_group_id": "c3dd5233-24a1-443c-6b40-310b3ad85382",
    "lts_stream_id": "9b476e31-b745-4e76-8d78-2081168651f7"
  } ]
}
```

Example Response

None

Status Code

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

Error Code

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

4.8.9 Querying Whether Show Original Log Is Enabled

Function

This API is used to query whether Show Original Log is enabled. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/slowlog/query

Table 4-771 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Instance ID.

Request Parameters

Table 4-772 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-773 Response body parameter

Parameter	Type	Description
open_slow_log_switch	Boolean	Definition Whether slow query logs are enabled. Range • true: enabled • false: disabled

Status code: 400**Table 4-774** Response body parameters

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

Status code: 500**Table 4-775** Response body parameters

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

Example Request

Querying whether Show Original Log is enabled

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/slowlog/query
```

Example Response

Status code: 200

Success.

```
{
  "open_slow_log_switch" : true
}
```

Status Code

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

Error Code

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

4.8.10 Enabling or Disabling Show Original Log

Function

This API is used to enable or disable Show Original Log. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/slowlog/modify

Table 4-776 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-777 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-778 Request body parameter

Parameter	Mandatory	Type	Description
open_slow_log_switch	Yes	Boolean	Definition Whether slow query logs are enabled. Constraints N/A Range • true: Slow query logs are enabled. • false: Slow query logs are disabled. Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-779 Response body parameters

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

Status code: 500

Table 4-780 Response body parameters

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

Example Request

Enabling or disabling Show Original Log

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/slowlog/modify
```

```
{  
  "open_slow_log_switch" : true  
}
```

Example Response

None

Status Code

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

Error Code

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

4.8.11 Querying Slow Query Log Statistics

Function

This API is used to query slow query log statistics. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/slow-logs/statistics

Table 4-781 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-782 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-783 Request body parameters

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
type	No	String	Definition Statement. If this parameter is left empty, all statements are queried. Constraints N/A Range • INSERT • UPDATE • SELECT • DELETE • CREATE • ALL Default Value N/A
database	No	String	Definition Database name. Constraints It cannot contain special characters such as < > &. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Start time. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . Constraints N/A Range N/A Default Value N/A
end_time	Yes	String	Definition End time. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . Only slow query logs generated within the past month can be queried. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
sort	No	String	Definition Sorting field. Constraints N/A Range - If this parameter is set to executeTime, slow query logs are sorted by average execution duration in descending order. - If this parameter is left empty or set to other values, the slow query logs are sorted by executions in descending order. Default Value N/A
order	No	String	Definition Sorting sequence. Constraints N/A Range desc: The query results are displayed in the descending order. asc: The query results are displayed in ascending order. Default Value desc

Response Parameters

Status code: 200

Table 4-784 Response body parameters

Parameter	Type	Description
slow_log_list	Array of ShowSlowLogStatisticsItem objects	Definition List of slow query log statistics.

Parameter	Type	Description
total_count	Integer	Definition Total records. Range N/A

Table 4-785 ShowSlowLogStatisticsItem

Parameter	Type	Description
client_ip	String	Definition IP address. Default Value N/A
count	String	Definition Number of executions. Default Value N/A
database	String	Definition Database that slow query logs belong to. Default Value N/A
lock_time	String	Definition Average lock wait time. Default Value N/A
node_id	String	Definition Node ID. Default Value Same as the input parameter
query_sample	String	Definition Execution syntax. Default Value N/A

Parameter	Type	Description
rows_examined	Integer	Definition Average number of scanned rows. Default Value N/A
rows_sent	Integer	Definition Average number of rows contained in a result. Default Value N/A
time	String	Definition Average execution duration. Default Value N/A
type	String	Definition Statement type. Default Value N/A
users	String	Definition Account. Default Value N/A

Status code: 400**Table 4-786** Response body parameters

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

Status code: 500**Table 4-787** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying slow query log statistics

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/6754902da1f447269c6979b0590102a5in07/slow-logs/statistics
```

```
{
  "limit" : 10,
  "offset" : 0,
  "node_id" : "4006312b96c541749d735c20e86dd169no07",
  "type" : null,
  "database" : null,
  "start_time" : "2024-08-16T14:37:00+0800",
  "end_time" : "2024-08-16T16:51:22+0800",
  "sort" : null,
  "order" : "desc"
}
```

Example Response

Status code: 200

Success.

```
{
  "slow_log_list" : [ {
    "node_id" : "4006312b96c541749d735c20e86dd169no07",
    "count" : "1 (100.00%)",
    "time" : "11.00014 s",
    "lock_time" : "0.00000 s",
    "rows_sent" : 1,
    "rows_examined" : 1,
    "database" : "",
    "users" : "root",
    "query_sample" : "select sleep(N);",
    "client_ip" : "localhost",
    "type" : "SELECT"
  } ],
  "total_count" : 1
}
```

Status Code

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

Error Code

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

4.8.12 Obtaining Links for Downloading Slow Query Logs

Function

This API is used to obtain links for downloading slow query logs. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/{node_id}/slowlog-download

Table 4-788 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-789 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-790 Response body parameters

Parameter	Type	Description
list	Array of DownloadSlowLogFileItem objects	Definition Links for downloading slow query logs.
count	Integer	Definition Number of slow query logs. Range N/A

Table 4-791 DownloadSlowLogFileItem

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A
file_name	String	Definition File name. Range N/A

Parameter	Type	Description
status	String	Definition Download status. Range • SUCCESS: The download link has been generated. • EXPORTING: The download link is being generated. • FAILED: The download link failed to be generated.
file_size	String	Definition File size, in KB. Range N/A
file_link	String	Definition Download link. The link is valid for 5 minutes. Range N/A
create_at	Long	Definition Creation time. Range N/A
updated_at	Long	Definition Update time. Range N/A

Status code: 400**Table 4-792** Response body parameters

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

Status code: 500

Table 4-793 Response body parameters

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

Example Request

Obtaining links for downloading slow query logs

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/6754902da1f447269c6979b0590102a5in07/941d21130b3c4899ad1a752a0945befdno07/slowlog-download
```

Example Response

Status code: 200

Success.

```
{
  "list": [ {
    "job_id": "73a5f4df-a111-4e09-b543-5ff3863eda71",
    "file_name":
"62b83dfd385f4d96afa6c7afd36dad7b_gaussdbformysql_slowlog_download_20240816081247776",
    "status": "SUCCESS",
    "file_size": 0,
    "file_link": "https://obs.cn-southwest-244.ulanhqab.huawei.com:443/dbsbucket-0-cn-southwest-244-
ea3ffcbdb5cc4b5789a77884f9*****/
62b83dfd385f4d96afa6c7afd36dad7b_gaussdbformysql_slowlog_download_20240816081247776?
AWSAccessKeyId=*****&Expires=1723796280&response-cache-control=no-cache%2Cno-
store&Signature=51RXPvQJg2RSolfqCHOqF5*****",
    "create_at": 1723795967769,
    "updated_at": 1723795980907
  } ],
  "count": 1
}
```

Status Code

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

Error Code

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

4.8.13 Downloading an Error Log

Function

This API is used to download an error log. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/{node_id}/errorlog-download

Table 4-794 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-795 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-796** Response body parameters

Parameter	Type	Description
count	Integer	Definition Quantity. Range N/A

Parameter	Type	Description
list	Array of RDSErrorLogDownload objects	Definition Links for downloading error logs.

Table 4-797 RDSErrorLogDownload

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A
file_name	String	Definition File name. Range N/A
status	String	Definition Status. Range N/A
file_size	String	Definition File size. Range N/A
file_link	String	Definition Link for downloading the file. Range N/A
create_at	Integer	Definition Creation time. Range N/A
updated_at	Integer	Definition Update time. Range N/A

Status code: 400**Table 4-798** Response body parameters

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

Status code: 500**Table 4-799** Response body parameters

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

Example Request

Downloading error logs

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/d53fb62bd61e4e9e9636fd2225f395beno07/errorlog-download
```

Example Response

None

Status Code

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

Error Code

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

4.8.14 Obtaining Audit Logs

Function

This API is used to obtain audit logs. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/audit-logs

Table 4-800 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-801 Query parameters

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Query start time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Range N/A Default Value N/A
end_time	Yes	String	Definition Query end time. Constraints The value is in the "yyyy-mm-ddThh:mm:ssZ" format. The end time must be later than the start time and the time span cannot be longer than 30 days. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
offset	Yes	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	Yes	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 10

Request Parameters

Table 4-802 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-803 Response body parameters

Parameter	Type	Description
audit_logs	Array of AuditLogDetail objects	Definition List of records. Range N/A

Parameter	Type	Description
total_count	Integer	Definition Total number of records. Range ≥ 0

Table 4-804 AuditLogDetail

Parameter	Type	Description
id	String	Definition Audit log ID. Range N/A
name	String	Definition Audit log file name. Range N/A
size	Long	Definition Audit log size, in KB. Range N/A
begin_time	String	Definition Start time of the audit log. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Range N/A

Parameter	Type	Description
end_time	String	Definition End time of the audit log. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Range N/A

Status code: 400

Table 4-805 Response body parameters

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

Status code: 500

Table 4-806 Response body parameters

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

Example Request

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/3d39c18788b54a919bab633874c159dfin01/audit-logs?start_time=2018-09-15T06:25:43+0800&end_time=2018-09-16T10:40:15+0800&offset=0&limit=10
```

Example Response

Status code: 200

Success.

```
{
  "audit_logs" : [ {
    "id" : "fa163ea0e2bet11e9d832166a2cf894c5br01",
```

```
{
  "name": "317156_20190916032844_eb8fe5d181ec44a2850302691541f760in01_Audit_166a2cf8-d832-11e9-94c5-fa163ea0e2be",
  "size": 20481.835938,
  "begin_time": "2019-11-06T09:03:34+0800",
  "end_time": "2019-11-06T10:39:15+0800"
}, {
  "id": "fa163ea0e2bet11e9d832136a668094c5br01",
  "name": "317162_20190916032838_eb8fe5d181ec44a2850302691541f760in01_Audit_136a6680-d832-11e9-94c5-fa163ea0e2be",
  "size": 20481.835938,
  "begin_time": "2019-11-07T09:04:35+0800",
  "end_time": "2019-11-07T10:38:16+0800"
} ],
"total_count": 2
}
```

Status Code

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

Error Code

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

4.8.15 Setting SQL Audit

Function

This API is used to set a policy for SQL audit logs. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/audit-log-policy

Table 4-807 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-808 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-809 Request body parameters

Parameter	Mandatory	Type	Description
keep_days	Yes	Integer	Definition Number of days for storing audit logs. The value 0 indicates that SQL audit is disabled. Constraints N/A Range 0–732 Default Value 7
reserve_audit_logs	No	Boolean	Definition This parameter is only valid when SQL audit is disabled. Constraints N/A Range • true: Historical audit logs will be reserved for some time when SQL audit is disabled. • false: Historical audit logs will be deleted immediately when SQL audit is disabled. Default Value true
audit_types	No	Array of strings	Definition Operation types recorded in audit logs, which are dynamic. If this parameter is left blank, all operation types will be recorded by default. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-810 Response body parameters

Parameter	Type	Description
result	String	Definition Results of setting SQL audit. Range The value can be COMPLETED or FAILED .
job_id	String	Definition Task flow ID. Range N/A

Status code: 400

Table 4-811 Response body parameters

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

Status code: 500

Table 4-812 Response body parameters

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

Example Request

- Updating the policy for SQL audit logs

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin07/audit-log-policy
```

```
{  
  "keep_days" : 5,  
  "audit_types" : [ "SELECT" ]  
}
```

- Disabling SQL audit

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin07/audit-log-policy
```

```
{  
  "keep_days" : 0,  
  "reserve_audit_logs" : false  
}
```

Example Response

Status code: 200

Success.

```
{  
  "result" : "COMPLETED",  
  "job_id" : "e7a7535b-eb9b-45ac-a83a-020dc5016d94"  
}
```

Status Code

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

Error Code

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

4.8.16 Querying the Policy for SQL Audit Logs

Function

This API is used to query the policy for SQL audit logs. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/audit-log-policy

Table 4-813 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-814 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-815** Response body parameters

Parameter	Type	Description
keep_days	Integer	Definition Number of days for storing audit logs. The value 0 indicates that SQL audit is disabled. Range 0-732

Parameter	Type	Description
audit_types	Array of strings	Definition Actual operation types recorded in audit logs. If this parameter is left blank, no operation types are filtered out. Range The value range is dynamic.
all_audit_log_action	String	Definition All operation types that can be recorded in audit logs. Range N/A

Status code: 400

Table 4-816 Response body parameters

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

Status code: 500

Table 4-817 Response body parameters

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

Example Request

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin07/audit-log-policy
```

Example Response

Status code: 200

Success.

```
{  
  "keep_days" : 7,
```

```
"audit_types" : [ "CREATE", "ALTER" ],
"all_audit_log_action" : "{\\"DCL\\":\\"CREATE_USER,DROP_USER,RENAME_USER,GRANT,REVOKE,ALTER_USER,ALTER_USER_DEFAULT_ROLE\\",\\"DDL\\":\\"CREATE,ALTER,DROP,RENAME,TRUNCATE,REPAIR,OPTIMIZE\\",\\"DML\\":\\"INSERT,DELETE,UPDATE,REPLACE,SELECT\\",\\"OTHER\\":\\"BEGIN/COMMIT/ROLLBACK,PREPARED_STATEMENT,CALL_PROCEDURE,KILL,SET_OPTION,CHANGE_DB,UNINSTALL_PLUGIN,UNINSTALL_PLUGIN,INSTALL_PLUGIN,SHUTDOWN,SLAVE_START,SLAVE_STOP,LOCK_TABLES,UNLOCK_TABLES,FLUSH,XA\\"}"
}
```

Status Code

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

Error Code

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

4.8.17 Obtaining Links for Downloading Audit Logs

Function

This API is used to obtain links for downloading audit logs. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/audit-log-link

Table 4-818 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-819 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-820 Request body parameter

Parameter	Mandatory	Type	Description
ids	Yes	Array of strings	Definition List of audit log IDs. To obtain this value, see Obtaining Audit Logs . Constraints A maximum of 50 audit log IDs are allowed in the list.

Response Parameters

Status code: 200

Table 4-821 Response body parameter

Parameter	Type	Description
links	Array of strings	Definition List of audit log download links. The links are valid for 5 minutes. Range N/A

Status code: 400

Table 4-822 Response body parameters

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

Status code: 500**Table 4-823** Response body parameters

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

Example Request

Obtaining links for downloading audit logs

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin01/audit-log-link
```

```
{  
  "ids" : [ "fa163e9970a3t11e9d834e122fdceb1d6br01", "fa163ea0e2bet11e9d8364943103c94c5br01" ]  
}
```

Example Response

Status code: 200

Success.

```
{  
  "links" : [ "https://obs.domainname.com/rdsbucket.username.1/xxxxxx", "https://obs.domainname.com/  
rdsbucket.username.2/xxxxxx" ]  
}
```

Status Code

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

Error Code

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

4.9 Tag Management

4.9.1 Querying Resource Tags

Function

This API is used to query tags of a specified instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/tags

Table 4-824 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-825 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-826 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-827** Response body parameters

Parameter	Type	Description
total_count	Integer	Definition Total number of records. Range N/A

Parameter	Type	Description
tags	Array of ResourceTagItem objects	Definition Tag list.

Table 4-828 ResourceTagItem

Parameter	Type	Description
key	String	Definition Tag key. Range It contains a maximum of 36 Unicode characters and cannot be null, an empty string, or a space. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-).
value	String	Definition Tag value. Range It contains a maximum of 43 Unicode characters. It can be an empty string but cannot be a space. It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-).

Status code: 400**Table 4-829** Response body parameters

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

Status code: 500**Table 4-830** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying resource tags

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
61a4ea66210545909d74a05c27a7179ein07/tags?offset=0&limit=2
```

Example Response

Status code: 200

Success.

```
{  
  "total_count" : 2,  
  "tags" : [{  
    "key" : "key1",  
    "value" : "value1"  
  }, {  
    "key" : "key2",  
    "value" : "value2"  
  }]  
}
```

Status Code

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

Error Code

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

4.9.2 Querying Project Tags

Function

This API is used to query all tags of instances in a specified project. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
GET /v3/{project_id}/tags
```

Table 4-831 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-832 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-833 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-834** Response body parameters

Parameter	Type	Description
total_count	Integer	Definition Total number of records. Range N/A

Parameter	Type	Description
tags	Array of ProjectTagItem objects	Definition Tag list.

Table 4-835 ProjectTagItem

Parameter	Type	Description
key	String	Definition Tag key. Range It contains a maximum of 36 Unicode characters and cannot be null, an empty string, or a space. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-).
values	Array of strings	Definition Tag value. Range It contains a maximum of 43 Unicode characters. It can be an empty string but cannot be a space. It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-).

Status code: 400**Table 4-836** Response body parameters

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

Status code: 500**Table 4-837** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying project tags

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/tags?offset=0&limit=2
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 2,
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value3", "value4" ]
  } ]
}
```

Status Code

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

Error Code

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

4.9.3 Adding or Deleting Tags in Batches

Function

This API is used to add tags to or delete tags from a specified DB instance in batches. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/tags/action

Table 4-838 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-839 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-840 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Definition Tag operation. Constraints N/A Range • create: Add tags. • delete: Delete tags. Default Value N/A

Parameter	Mandatory	Type	Description
tags	Yes	Array of TagItem objects	Definition Tag list. Constraints N/A

Table 4-841 TagItem

Parameter	Mandatory	Type	Description
key	Yes	String	Definition Tag key. Constraints N/A Range The value can contain 1 to 128 Unicode characters. It cannot be null, an empty string, or a space. It is case-sensitive and can contain digits, letters, underscores (_), and hyphens (-). Default Value N/A

Parameter	Mandatory	Type	Description
value	No	String	Definition Tag value. Constraints • If action is set to create, this parameter is mandatory. • If action is set to delete and value is specified, tags are deleted by key and value. If value is not specified, tags are deleted by key. Range The value can contain 0 to 255 Unicode characters. It can be an empty string but cannot be a space. It is case-sensitive and can contain digits, letters, underscores (_), periods (.), and hyphens (-). Default Value N/A

Response Parameters

Status code: 200

Success.

Status code: 400

Table 4-842 Response body parameters

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

Status code: 500

Table 4-843 Response body parameters

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

Example Request

- Adding tags in batches

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/61a4ea66210545909d74a05c27a7179ein07/tags/action
{
  "action": "create",
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

- Deleting tags in batches

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/61a4ea66210545909d74a05c27a7179ein07/tags/action
{
  "action": "delete",
  "tags": [ {
    "key": "key1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

Example Response

None

Status Code

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

Error Code

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

4.10 Database User Management

4.10.1 Creating a Database Account

Function

This API is used to create a database account for a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/db-users

Table 4-844 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-845 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-846 Request body parameter

Parameter	Mandatory	Type	Description
users	Yes	Array of CreateDatabaseUserList objects	Definition List of database users. Constraints The list can contain a maximum of 50 database users.

Table 4-847 CreateDatabaseUserList

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A
password	Yes	String	Definition Database user password. Constraints The password cannot be empty and must be different from the username. You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. Range The password can consist of 8 to 32 characters and must contain at least three types of the following: uppercase letters, lowercase letters, digits, and special characters .~!@#\$\$%^*_-=+?,()& Default Value N/A

Parameter	Mandatory	Type	Description
comment	No	String	Definition Database description. Constraints This parameter is only available for instances whose kernel version is 2.0.13.0 or later. To upgrade an instance to the latest version, see Upgrading the Kernel Version of a DB Instance . Range The value can consist of up to 512 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value N/A
hosts	No	Array of strings	Definition List of host IP addresses. Constraints The list can contain a maximum of 50 IP addresses. Range % and IP addresses. If the value is 10.10.10.% , all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value The default value is %, indicating that all IP addresses are allowed to access your TaurusDB instance.

Parameter	Mandatory	Type	Description
databases	No	Array of CreateDatabaseList objects	Definition List of the databases. When you create a database user, you can grant the permissions of databases in the list to the user. To grant database permissions to a database user, call the API (Granting Permissions to a Database User). Constraints The list can contain a maximum of 50 databases, or it can be left blank.

Table 4-848 CreateDatabaseList

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database name. Constraints The database must exist. Range The database name can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The total number of hyphens (-) cannot exceed 10. Default Value N/A
readonly	Yes	Boolean	Definition Whether the permission is read-only. Constraints N/A Range • true: read-only • false: read/write Default Value N/A

Response Parameters

Status code: 201

Table 4-849 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for creating a database account. Range The value is compliant with the UUID format.

Status code: 400

Table 4-850 Response body parameters

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

Status code: 500

Table 4-851 Response body parameters

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

Example Request

Creating a database user with the read/write permission (The host IP address is 127.0.0.1.)

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/db-users
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "password": "Rds_1234",
    "hosts": [ "127.0.0.1" ],
    "comment": "database_user_comment",
    "databases": [ {
      "name": "test",
      "readonly": false
    } ]
  } ]
}
```

Example Response

Status code: 201

Success.

```
{  
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

Status Code

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

Error Code

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

4.10.2 Querying Database Users

Function

This API is used to query database users of a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/db-users

Table 4-852 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-853 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-854 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-855** Response body parameters

Parameter	Type	Description
users	Array of ListGaussMySqlDatabaseUser objects	Definition List of database users.

Parameter	Type	Description
total_count	Integer	Definition Total number of database users of an instance. Range N/A

Table 4-856 ListGaussMySqlDatabaseUser

Parameter	Type	Description
name	String	Definition Database username. Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed.
host	String	Definition Host IP address. Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma).
comment	String	Definition Database user description. Range The value can consist of up to 512 characters. It cannot contain carriage returns or any of the following special characters: ! <"='>&

Parameter	Type	Description
databases	Array of ListGaussMySqlDatabase objects	Definition Database list.

Table 4-857 ListGaussMySqlDatabase

Parameter	Type	Description
name	String	Definition Database name. Range N/A
readonly	Boolean	Definition Whether the permission is read-only. Range • true: read-only • false: read/write

Status code: 400**Table 4-858** Response body parameters

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

Status code: 500**Table 4-859** Response body parameters

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

Example Request

Querying database users

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users?offset=0&limit=100
```

Example Response

Status code: 200

Success.

```
{  
  "users": [ {  
    "name": "gaussdb_mysql_user1",  
    "host": "127.0.0.1",  
    "comment": "database_user_comment",  
    "databases": [ {  
      "name": "test",  
      "readonly": false  
    } ]  
  } ],  
  "total_count": 1  
}
```

Status Code

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

Error Code

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

4.10.3 Deleting Database Users

Function

This API is used to delete database users. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/db-users

Table 4-860 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-861 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-862 Request body parameter

Parameter	Mandatory	Type	Description
users	Yes	Array of ListDeleteDatabaseUserRequest objects	Definition List of database users to be deleted. The list contains up to 50 database users. Constraints N/A

Table 4-863 ListDeleteDatabaseUserRequest

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value %

Response Parameters

Status code: 202

Table 4-864 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for deleting database users. Range N/A

Status code: 400**Table 4-865** Response body parameters

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

Status code: 500**Table 4-866** Response body parameters

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

Example Request

Deleting the database user whose host IP address is 127.0.0.1

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users  
{  
  "users": [ {  
    "name": "gaussdb_mysql_user1",  
    "host": "127.0.0.1"  
  } ]  
}
```

Example Response

Status code: 202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

Status Code

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

Error Code

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

4.10.4 Modifying the Description of a Database User

Function

This API is used to modify the description of a database user. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/db-users/comment

Table 4-867 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-868 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-869 Request body parameters

Parameter	Mandatory	Type	Description
users	Yes	Array of UpdateDatabaseUserComment objects	Definition List of database users that you want to modify the description for. Constraints The list contains up to 50 database users.

Table 4-870 UpdateDatabaseUserComment

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value %
comment	Yes	String	Definition Database user description. Constraints This parameter is only available for instances whose kernel version is 2.0.13.0 or later. To upgrade a kernel version, see Upgrading the Kernel Version of a DB Instance . Range The value can consist of up to 512 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value N/A

Response Parameters

Status code: 202

Table 4-871 Response body parameters

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying the description of a database user. Range N/A

Status code: 400

Table 4-872 Response body parameters

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

Status code: 500

Table 4-873 Response body parameters

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

Example Request

Modifying the description of a database user

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/comment
```

```
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "host": "127.0.0.1",
    "comment": "first_database_user"
  } ]
}
```

Example Response

Status code: 202

Success.

```
{
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.10.5 Changing Password of a Database User

Function

This API is used to change the password of a database user. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/db-users/password

Table 4-874 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-875 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-876 Request body parameter

Parameter	Mandatory	Type	Description
users	Yes	Array of ResetDatabasePassword objects	Definition List of database users whose passwords are to be changed. Constraints The list can contain a maximum of 50 database users.

Table 4-877 ResetDatabasePassword

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value %
password	Yes	String	Definition Password of the database user. Constraints You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. Range The value cannot be empty. It can consist of 8 to 32 characters and must contain at least three types of the following: uppercase letters, lowercase letters, digits, and special characters .~!@#\$\$%^*-_+=?,()& Default Value N/A

Response Parameters

Status code: 202

Table 4-878 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for changing the passwords of database users. Range N/A

Status code: 400

Table 4-879 Response body parameters

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

Status code: 500

Table 4-880 Response body parameters

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

Example Request

Changing password of database user **gaussdb_mysql_user1**

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/password
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "host": "127.0.0.1",
    "password": "Rds_1234"
  } ]
}
```

Example Response

Status code: 202

Success.

```
{  
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

Status Code

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

Error Code

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

4.10.6 Granting Permissions to a Database User

Function

This API is used to grant permissions to a database user. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/db-users/privilege

Table 4-881 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-882 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-883 Request body parameter

Parameter	Mandatory	Type	Description
users	Yes	Array of GrantDatabasePermission objects	Definition List of database users. Constraints The list can contain a maximum of 50 database users.

Table 4-884 GrantDatabasePermission

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints The value must be the username of the current instance. Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value %
databases	Yes	Array of DatabasePermission objects	Definition List of database permissions. The list contains up to 50 database permissions. Constraints N/A

Table 4-885 DatabasePermission

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database name. Constraints N/A Range The database name can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A
readonly	Yes	Boolean	Definition Whether the permission is read-only. Constraints N/A Range • true: read-only • false: read/write Default Value N/A

Response Parameters

Status code: 201

Table 4-886 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for granting permissions to a user. Range N/A

Status code: 400

Table 4-887 Response body parameters

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

Status code: 500**Table 4-888** Response body parameters

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

Example Request

Granting the read/write permission to a database user

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/privilege
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "host": "127.0.0.1",
    "databases": [ {
      "name": "test",
      "readonly": false
    } ]
  } ]
}
```

Example Response

Status code: 201

Success.

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.10.7 Deleting Permissions of a Database User

Function

This API is used to delete permissions of a database user. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/db-users/privilege

Table 4-889 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-890 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-891 Request body parameter

Parameter	Mandatory	Type	Description
users	Yes	Array of DeleteDatabasePermission objects	Definition List of database users. Constraints The list can contain a maximum of 50 database users.

Table 4-892 DeleteDatabasePermission

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value %
databases	Yes	Array of strings	Definition Database list. Constraints The list can contain a maximum of 50 databases.

Response Parameters

Status code: 202

Table 4-893 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for deleting database permissions of database users. Range N/A

Status code: 400

Table 4-894 Response body parameters

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

Status code: 500

Table 4-895 Response body parameters

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

Example Request

Deleting permissions of database user **gaussdb_mysql_user1**

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/privilege
{
  "users" : [ {
    "name" : "gaussdb_mysql_user1",
    "host" : "127.0.0.1",
    "databases" : [ "test" ]
  } ]
}
```

Example Response

Status code: 202

Success.

```
{
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.11 Database Management

4.11.1 Querying Available Database Character Sets

Function

This API is used to query available database character sets of a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/databases/charsets

Table 4-896 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-897 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-898 Response body parameter

Parameter	Type	Description
charsets	Array of strings	Definition List of database character sets.

Status code: 400

Table 4-899 Response body parameters

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

Status code: 500

Table 4-900 Response body parameters

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

Example Request

Querying available database character sets

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/databases/charsets
```

Example Response

Status code: 200

Success.

```
{  
  "charsets": [ "utf8mb4", "gbk" ]  
}
```

Status Code

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

Error Code

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

4.11.2 Creating a Database

Function

This API is used to create a database for a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/databases

Table 4-901 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-902 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-903 Request body parameter

Parameter	Mandatory	Type	Description
databases	Yes	Array of CreateGaussMySqlDatabase objects	Definition Database list. Constraints The list can contain a maximum of 50 databases.

Table 4-904 CreateGaussMySqlDatabase

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database name. Constraints N/A Range The database name can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The total number of hyphens (-) cannot exceed 10. Default Value N/A
comment	No	String	Definition Database description. Constraints N/A Range The value can consist of up to 512 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value N/A

Parameter	Mandatory	Type	Description
character_set	Yes	String	Definition Character set used by the database. Constraints N/A Range • utf8: UTF-8 character set, which uses one to three bytes per character. • latin1: It contains 256 characters, which are the ASCII characters plus 128 common Western European characters. It uses 1 byte per character. • utf8mb4: complete UTF-8 character set, which uses one to four bytes per character. It can represent more characters, including some special characters and emojis. Default Value N/A
users	No	Array of GaussMySqlDatabaseUser objects	Definition List of database users. When you create a database, you can grant the database permissions to the users in the list. To grant database permissions to a database user, call the API (Granting Permissions to a Database User). Constraints If there is no database user in the list, you cannot grant the database permissions to database users when creating a database. The list can contain a maximum of 50 database users.

Table 4-905 GaussMySqlDatabaseUser

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database username. Constraints N/A Range The username can consist of 1 to 32 characters. Only letters, digits, and underscores (_) are allowed. Default Value N/A
host	Yes	String	Definition Host IP address. Constraints N/A Range • If the value is %, all IP addresses are allowed to access your TaurusDB instance. • If the value is 10.10.10.%, all IP addresses in the subnet 10.10.10.X are allowed to access your TaurusDB instance. • To specify multiple IP addresses, separate them with commas (,), for example, 192.168.0.1,172.16.213.9 (no spaces before or after the comma). Default Value N/A

Parameter	Mandatory	Type	Description
readonly	Yes	Boolean	Definition Whether the permission is read-only. Constraints N/A Range • true: read-only • false: read/write Default Value N/A

Response Parameters

Status code: 201

Table 4-906 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for creating a database. Range N/A

Status code: 400

Table 4-907 Response body parameters

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

Status code: 500

Table 4-908 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Creating a database (with utf8mb4 as character set and read/write permission)

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/databases
{
  "databases": [ {
    "name": "test",
    "comment": "database_comment",
    "character_set": "utf8mb4",
    "users": [ {
      "name": "gaussdb_mysql_user1",
      "host": "127.0.0.1",
      "readonly": false
    } ]
  } ]
}
```

Example Response

Status code: 201

Success.

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.11.3 Querying Databases

Function

This API is used to query databases of a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/databases

Table 4-909 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-910 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1–100 Default Value 100
name	No	String	Definition Database name. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
charset	No	String	Definition Character set used by the database. To obtain this value, see Querying Available Database Character Sets . Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-911 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-912 Response body parameters

Parameter	Type	Description
databases	Array of ListGaussMySqlDatabaseInfo objects	Definition Database list.
total_count	Integer	Definition Total number of databases. Range ≥ 0

Table 4-913 ListGaussMySqlDatabaseInfo

Parameter	Type	Description
name	String	Definition Database name. Range N/A
charset	String	Definition Character set used by the database. Range N/A

Parameter	Type	Description
comment	String	Definition Database description. Range N/A
users	Array of GaussMySqlDatabaseInfo objects	Definition List of authorized database users.

Table 4-914 GaussMySqlDatabaseInfo

Parameter	Type	Description
name	String	Definition Database username. Range N/A
host	String	Definition Host IP address. Range N/A
readonly	Boolean	Definition Whether the permission is read-only. Range • true: read-only • false: read/write

Status code: 400**Table 4-915** Response body parameters

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

Status code: 500

Table 4-916 Response body parameters

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

Example Request

Querying databases

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/a23fb62bd61e4e9e9636fd2225f395bein07/databases?offset=0&limit=100&charset=utf8mb4&name=test
```

Example Response

Status code: 200

Success.

```
{
  "databases": [ {
    "name": "test",
    "charset": "utf8mb4",
    "comment": "database_comment",
    "users": [ {
      "name": "gaussdb-mysql-instance1",
      "host": "127.0.0.1",
      "readonly": false
    } ]
  } ],
  "total_count": 1
}
```

Status Code

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

Error Code

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

4.11.4 Deleting a Database

Function

This API is used to delete a database from a TaurusDB instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/databases

Table 4-917 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-918 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-919 Request body parameter

Parameter	Mandatory	Type	Description
databases	Yes	Array of strings	Definition List of databases to be deleted. Constraints N/A Range The list can contain up to 50 databases. Default Value N/A

Response Parameters

Status code: 202

Table 4-920 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for deleting databases. Range N/A

Status code: 400

Table 4-921 Response body parameters

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

Status code: 500

Table 4-922 Response body parameters

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

Example Request

Deleting databases

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/databases
{
  "databases": [ "test" ]
}
```

Example Response

Status code: 202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

Status Code

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

Error Code

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

4.11.5 Modifying the Description of a Database

Function

This API is used to modify the description of a database. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/databases/comment

Table 4-923 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-924 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-925 Request body parameters

Parameter	Mandatory	Type	Description
databases	Yes	Array of Table 4-926 objects	Definition List of databases that you want to modify the description for. Constraints The list can contain up to 50 databases.

Table 4-926 UpdateDatabaseComment

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Database name. Constraints N/A Range The database name can contain 1 to 64 characters. Only letters, digits, hyphens (-), and underscores (_) are allowed. The total number of hyphens (-) cannot exceed 10. Default Value N/A

Parameter	Mandatory	Type	Description
comment	Yes	String	Definition Database description. Constraints N/A Range The value can consist of up to 512 characters. It cannot contain carriage returns or any of the following special characters: !<"='>& Default Value N/A

Response Parameters

Status code: 202

Table 4-927 Response body parameters

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying the description of a database. Range N/A

Status code: 400

Table 4-928 Response body parameters

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

Status code: 500

Table 4-929 Response body parameters

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

Example Request

Modifying the description of a database

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/databases/comment
{
  "databases": [ {
    "name": "gaussdb_mysql_user1",
    "comment": "first_database"
  } ]
}
```

Example Response

Status code: 202

Success.

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

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

Error Code

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

4.12 Traffic Management

4.12.1 Enabling or Disabling SQL Throttling

Function

This API is used to enable or disable SQL throttling. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/sql-filter/switch

Table 4-930 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-931 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-932 Request body parameter

Parameter	Mandatory	Type	Description
switch_status	Yes	String	Definition Whether SQL throttling is enabled. Constraints N/A Range ON: enabled OFF: disabled Default Value N/A

Response Parameters

Status code: 200

Table 4-933 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for enabling or disabling SQL throttling. Range N/A

Status code: 400

Table 4-934 Response body parameters

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

Status code: 500

Table 4-935 Response body parameters

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

Example Request

- Enabling SQL throttling
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
{
 "switch_status" : "ON"
}
- Disabling SQL throttling
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
{
 "switch_status" : "OFF"
}

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "aef6a470-fb63-4d5b-b644-12ead7e019b3"  
}
```

Status Code

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

Error Code

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

4.12.2 Querying Whether SQL Throttling Is Enabled

Function

This API is used to query whether SQL throttling is enabled. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/sql-filter/switch

Table 4-936 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-937 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-938 Response body parameter

Parameter	Type	Description
switch_status	String	Definition Whether SQL throttling is enabled. Range ON: enabled OFF: disabled

Status code: 400

Table 4-939 Response body parameters

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

Status code: 500

Table 4-940 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying whether SQL throttling is enabled

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
```

Example Response

Status code: 200

Success.

```
{
  "switch_status": "ON"
}
```

Status Code

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

Error Code

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

4.12.3 Configuring SQL Throttling Rules

Function

This API is used to configure SQL throttling rules. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
PUT /v3/{project_id}/instances/{instance_id}/sql-filter/rules
```


Table 4-941 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-942 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-943 Request body parameter

Parameter	Mandatory	Type	Description
sql_filter_rules	Yes	Array of NodeSqlFilterRuleInfo objects	Definition SQL throttling rules for nodes. Constraints N/A

Table 4-944 NodeSqlFilterRuleInfo

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
rules	Yes	Array of NodeSqlFilterRule objects	Definition SQL throttling rules. Constraints The sql_type value must be unique.

Table 4-945 NodeSqlFilterRule

Parameter	Mandatory	Type	Description
sql_type	Yes	String	Definition SQL statements. Constraints N/A Range • SELECT • UPDATE • DELETE • INSERT (The kernel version must be later than 2.0.54.240600.) Default Value N/A
patterns	Yes	Array of NodeSqlFilterRulePattern objects	Definition SQL throttling rules. Constraints N/A

Table 4-946 NodeSqlFilterRulePattern

Parameter	Mandatory	Type	Description
pattern	Yes	String	Definition SQL throttling rule. Constraints N/A Range A rule can consist of up to 128 keywords. The keywords are separated by tildes (~), for example, select~from~t1 . The rule cannot contain backslashes (\), commas (,), or double tildes (~~). It cannot end with tildes (~). Default Value N/A
max_concurrency	Yes	Integer	Definition Maximum number of concurrent SQL statements. Constraints N/A Range ≥ 0 Default Value N/A

Response Parameters

Status code: 200

Table 4-947 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for configuring SQL throttling rules. Range N/A

Status code: 400**Table 4-948** Response body parameters

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

Status code: 500**Table 4-949** Response body parameters

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

Example Request

Configuring SQL throttling rules (SQL statements include SELECT, UPDATE, and DELETE.)

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/rules
```

```
{
  "sql_filter_rules": [ {
    "node_id": "c01a5645eb2c4fb6a9373542f5366e50no07",
    "rules": [ {
      "sql_type": "SELECT",
      "patterns": [ {
        "pattern": "select~from~t1",
        "max_concurrency": 0
      }, {
        "pattern": "select~from~t3~where~id",
        "max_concurrency": 10
      } ]
    }, {
      "sql_type": "UPDATE",
      "patterns": [ {
        "pattern": "update~t3~where~id",
        "max_concurrency": 10
      } ]
    } ]
  }, {
    "node_id": "b234a5645eb2c4ji3b9372342f5362397no07",
    "rules": [ {
      "sql_type": "SELECT",
      "patterns": [ {
        "pattern": "select~from~t3~where~id",
        "max_concurrency": 10
      } ]
    }, {
      "sql_type": "DELETE",
      "patterns": [ {
        "pattern": "delete~t3~where~id",
        "max_concurrency": 10
      } ]
    } ]
  } ]
}
```

```
}]
}]
}]
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "aef6a470-fb63-4d5b-b644-12ead7e019b3"
}
```

Status Code

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

Error Code

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

4.12.4 Querying SQL Throttling Rules

Function

This API is used to query SQL throttling rules. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/sql-filter/rules

Table 4-950 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-951 Query parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
sql_type	No	String	Definition SQL statements. Constraints N/A Range The value can be SELECT , UPDATE , or DELETE (case-insensitive). You can leave this parameter empty. Default Value If this parameter is not specified, SQL throttling rules of all the statements are queried by default.

Request Parameters

Table 4-952 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-953** Response body parameters

Parameter	Type	Description
node_id	String	Definition Node ID. Range The value is the same as the node ID in the request.

Parameter	Type	Description
sql_filter_rules	Array of SqlFilterRule objects	Definition SQL throttling rules.

Table 4-954 SqlFilterRule

Parameter	Type	Description
sql_type	String	Definition SQL statements. Range • SELECT • UPDATE • DELETE
patterns	Array of SqlFilterRulePattern objects	Definition SQL throttling rules.

Table 4-955 SqlFilterRulePattern

Parameter	Type	Description
pattern	String	Definition SQL throttling rule. Range N/A
max_concurrency	Integer	Definition Maximum number of concurrent SQL statements. Range N/A

Status code: 400**Table 4-956** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 4-957 Response body parameters

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

Example Request

Querying SQL throttling rules

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/rules?node_id=c01a5645eb2c4fb6a9373542f5366e50no07
```

Example Response

Status code: 200

Success.

```
{
  "node_id": "c01a5645eb2c4fb6a9373542f5366e50no07",
  "sql_filter_rules": [ {
    "sql_type": "SELECT",
    "patterns": [ {
      "pattern": "select~from~t1",
      "max_concurrency": 0
    }, {
      "pattern": "select~from~t2~where~id",
      "max_concurrency": 10
    }
  ]
}, {
  "sql_type": "UPDATE",
  "patterns": [ {
    "pattern": "update~t1",
    "max_concurrency": 0
  }, {
    "pattern": "update~t2~where~id",
    "max_concurrency": 10
  }
], {
  "sql_type": "DELETE",
  "patterns": [ {
    "pattern": "delete~from",
    "max_concurrency": 0
  }
]
}
```

Status Code

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

Error Code

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

4.12.5 Deleting SQL Throttling Rules

Function

This API is used to delete SQL throttling rules. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/sql-filter/rules

Table 4-958 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-959 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-960 Request body parameter

Parameter	Mandatory	Type	Description
sql_filter_rules	Yes	Array of DeleteNodeSqlFilterRuleInfo objects	Definition SQL throttling rules for nodes.

Table 4-961 DeleteNodeSqlFilterRuleInfo

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
rules	Yes	Array of DeleteNodeSqlFilterRuleInfo objects	Definition SQL throttling rules to be deleted. Constraints N/A

Table 4-962 DeleteNodeSqlFilterRule

Parameter	Mandatory	Type	Description
sql_type	Yes	String	Definition SQL statements. Constraints N/A Range • SELECT • UPDATE • DELETE • INSERT (The kernel version must be later than 2.0.54.240600.) Default Value N/A
patterns	Yes	Array of strings	Definition SQL throttling rules. Constraints N/A Range A rule can consist of up to 128 keywords. The keywords are separated by tildes (~), for example, select~from~t1 . The rule cannot contain backslashes (\), commas (,), or double tildes (~~). It cannot end with tildes (~). Default Value N/A

Response Parameters

Status code: 200

Table 4-963 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for deleting SQL throttling rules. Range N/A

Status code: 400**Table 4-964** Response body parameters

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

Status code: 500**Table 4-965** Response body parameters

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

Example Request

Deleting SQL throttling rules (SQL statements include SELECT, UPDATE, and DELETE.)

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/rules
{
  "sql_filter_rules": [ {
    "node_id": "c01a5645eb2c4fb6a9373542f5366e50no07",
    "rules": [ {
      "sql_type": "SELECT",
      "patterns": [ "select~from~t1", "select~from~t2" ]
    }, {
      "sql_type": "UPDATE",
      "patterns": [ "update~t3~where~id" ]
    } ]
  }, {
    "node_id": "b234a5645eb2c4ji3b9372342f5362397no07",
    "rules": [ {
      "sql_type": "SELECT",
      "patterns": [ "select~from~t1", "select~from~t2" ]
    }, {
      "sql_type": "DELETE",
```



```
"patterns" : [ "delete~t3~where~id" ]
} ]
} ]
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "aef6a470-fb63-4d5b-b644-12ead7e019b3"
}
```

Status Code

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

Error Code

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

4.12.6 Querying User Session Threads on a Node

Function

This API is used to query user session threads on a TaurusDB node by page, similar to the **show processlist** command. Internal session threads are not returned. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/processes

Table 4-966 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
node_id	Yes	String	Definition Node ID, which uniquely identifies a node. Constraints N/A Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed. Default Value N/A

Table 4-967 Query parameters

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-968 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-969** Response body parameters

Parameter	Type	Description
processes	Array of TaurusDbProcessInfo objects	Definition User session threads.

Parameter	Type	Description
total_count	Integer	Definition Total number of user session threads on a node. Range ≥ 0

Table 4-970 TaurusDbProcessInfo

Parameter	Type	Description
id	Long	Definition ID of a user session thread.
user	String	Definition User who starts the session thread.
host	String	Definition Host and port that send requests.
db	String	Definition Name of the database that is being accessed.
command	String	Definition Command that is being executed.
time	Long	Definition How many seconds the user session thread remains in the current state.
state	String	Definition Status of the SQL statement that is being executed.
info	String	Definition Additional information, which is usually the statement that is being executed.

Status code: 400**Table 4-971** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 4-972 Response body parameters

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

Example Request

Querying the first 100 user session threads on a TaurusDB node

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/nodes/18663926eachb443d98dc20f8620f28f2no07/processes?
offset=0&limit=100
```

Example Response

Status code: 200

Success.

```
{
  "processes": [ {
    "id": 2075425,
    "user": "root",
    "host": "100.98.212.252:29285",
    "db": null,
    "command": "Query",
    "time": 103,
    "state": "User sleep",
    "info": "select sleep(1000)"
  }, {
    "id": 2075426,
    "user": "root",
    "host": "100.98.212.252:29285",
    "db": null,
    "command": "Query",
    "time": 105,
    "state": "User sleep",
    "info": "show processlist"
  } ],
  "total_count": 2
}
```

Status Code

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

Error Code

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

4.12.7 Terminating User Session Threads on a Node

Function

This API is used to terminate specified user session threads on a TaurusDB node, excluding any internal session threads passed in. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/processes

Table 4-973 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition Node ID, which uniquely identifies a node. Constraints N/A Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-974 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us
Content-Type	Yes	String	Definition Request body content type. Constraints N/A Range application/json Default Value N/A

Table 4-975 Request body parameter

Parameter	Mandatory	Type	Description
processes	Yes	Array of longs	Definition IDs of user session threads to be terminated. To obtain this value, call the API for querying user session threads on a node or run the show processlist command.

Response Parameters

Status code: 200

Table 4-976 Response body parameters

Parameter	Type	Description
processes_killed	Array of longs	Definition IDs of terminated user session threads.

Parameter	Type	Description
processes_not_found	Array of longs	Definition IDs of user session threads that were not found.

Status code: 400

Table 4-977 Response body parameters

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

Status code: 500

Table 4-978 Response body parameters

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

Example Request

Terminating specified user session threads on a TaurusDB node

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
a23fb62bd61e4e9e9636fd2225f395bein07/nodes/18663926eacb443d98dc20f8620f28f2no07/processes
{
  "processes" : [ 2075425, 2075426 ]
}
```

Example Response

Status code: 200

Success.

```
{
  "processes_killed" : [ 2075425, 2075426 ],
  "processes_not_found" : [ ]
}
```

Status Code

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

Error Code

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

4.13 Task Center

4.13.1 Obtaining Information About a Task with a Specified ID

Function

This API is used to obtain task information from the task center. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

Constraints

- This API is used to query asynchronous tasks of the last one month in the task center.
- After a task is generated, it takes several seconds to query the task ID.

URI

GET /v3/{project_id}/jobs

Table 4-979 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-980 Query parameters

Parameter	Mandatory	Type	Description
id	Yes	String	Definition Task ID. To obtain this value, see Obtaining Instant Tasks and Obtaining Scheduled Tasks . Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-981 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-982 Response body parameters

Parameter	Type	Description
job	GetJobInfoDetail object	Definition Task information.

Table 4-983 GetJobInfoDetail

Parameter	Type	Description
id	String	Definition Task ID. Range The value is the same as that of the input parameter.
name	String	Definition Task name. Range N/A

Parameter	Type	Description
status	String	Definition Task execution status. Range ● Pending: The task is delayed and is not executed. ● Running: The task is being executed. ● Completed: The task has been successfully executed. ● Failed: The task failed to be executed.
created	String	Definition Creation time. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
ended	String	Definition End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
process	String	Definition Task execution progress. Range The execution progress (such as 60%) is only displayed when the task is being executed. Otherwise, "" is returned.
instance	GetJobInstanceInfoDetail object	Definition Instance information of the task with the specified ID.
entities	Object	Definition Displayed information varies depending on tasks.

Parameter	Type	Description
fail_reason	String	Definition Task failure information. Range N/A

Table 4-984 GetJobInstanceInfoDetail

Parameter	Type	Description
id	String	Definition Instance ID, which uniquely identifies an instance. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
name	String	Definition Instance name. Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed.

Status code: 400**Table 4-985** Response body parameters

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

Status code: 500**Table 4-986** Response body parameters

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

Example Request

Obtaining information about a task with a specified ID

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/jobs?id=a9767ede-fe0f-4888-9003-e843a4c90514
```

Example Response

Status code: 200

NOTE

In the response example, some tasks in the task center are used as examples.

Success.

```
{
  "job" : {
    "id" : "31b8ae23-c687-4d80-b7b4-42a66c9bb886",
    "name" : "CreateGaussDBforMySQLInstance",
    "status" : "Completed",
    "created" : "2018-08-06T10:41:14+0800",
    "ended" : "2018-08-06T16:41:14+0000",
    "process" : "",
    "instance" : {
      "id" : "a48e43ff268f4c0e879652d65e63d0fbin07",
      "name" : "DO-NOT-TOUCH-mgr2-mysql-single"
    },
    "entities" : {
      "instance" : {
        "endpoint" : "192.168.1.203:3306",
        "type" : "Cluster",
        "datastore" : {
          "type" : "gaussdb-mysql",
          "version" : "8.0"
        }
      },
      "resource_ids" : [ "a48e43ff268f4c0e879652d65e63d0fbin07.vm",
        "a48e43ff268f4c0e879652d65e63d0fbin07.volume" ]
    }
  }
}
```

Status Code

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

Error Code

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

4.13.2 Obtaining Instant Tasks

Function

This API is used to obtain the instant tasks. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/immediate-jobs

Table 4-987 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-988 Query parameters

Parameter	Mandatory	Type	Description
status	No	String	Definition Task execution status. Constraints N/A Range • Running: The task is being executed. • Completed: The task is successfully executed. • Failed: The task failed to be executed. • Pending: The task is not executed. • Unauthorized: The task is to be authorized. • Canceled: The task is canceled. Default Value N/A

Parameter	Mandatory	Type	Description
job_name	No	String	Definition Task name. Constraints N/A Range • CreateGaussDBforMySQLInstance: creating a DB instance • RestoreGaussDBforMySQLNewInstance: restoring data to a new DB instance • AddGaussDBforMySQLNodes: adding nodes • DeleteGaussDBforMySQLNode: deleting nodes • RebootGaussDBforMySQLInstance: rebooting a DB instance • ModifyGaussDBforMySQLPort: changing a database port • ModifyGaussDBforMySQLSecurityGroup: changing a security group • ResizeGaussDBforMySQLFlavor: changing instance specifications • SwitchoverGaussDBforMySQLMasterNode: promoting a read replica to primary • GaussDBforMySQLBindEIP: binding an EIP • GaussDBforMySQLUnbindEIP: unbinding an EIP • RenameGaussDBforMySQLInstance: changing a DB instance name • DeleteGaussDBforMySQLInstance: deleting a DB instance • UpgradeGaussDBforMySQLDatabaseVersion:

Parameter	Mandatory	Type	Description
			upgrading an instance version • EnlargeGaussDBforMySQLProxy: adding nodes to a proxy instance • OpenGaussDBforMySQL-Proxy: enabling database proxy • CloseGaussDBforMySQL-Proxy: disabling database proxy • GaussdbforMySQLModify-ProxyIp: changing a proxy address • ScaleGaussDBforMySQL-Proxy: changing the node specifications of a proxy instance • GaussDBforMySQLModifyInstanceMetricExtend: enabling or disabling Monitoring by Seconds • GaussDBforMySQLModifyInstanceDataVip: changing the private IP address • GaussDBforMySQLSwitchSSL: enabling or disabling SSL • GaussDBforMySQLModifyProxyConsist: changing the proxy consistency • GaussDBforMySQLModifyProxyWeight: changing the read weights of proxy nodes Default Value N/A

Parameter	Mandatory	Type	Description
job_id	No	String	Definition Task ID. Constraints N/A Range N/A Default Value N/A
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 10, 20, and 50 Default Value 10

Parameter	Mandatory	Type	Description
start_time	No	String	Definition Start time. Constraints N/A Range The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Default Value N/A
end_time	No	String	Definition End time. Constraints N/A Range The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Default Value N/A

Request Parameters

Table 4-989 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-990** Response body parameters

Parameter	Type	Description
jobs	Array of TaskDetailInfo objects	Definition Task details.

Parameter	Type	Description
total_count	Integer	Definition Total number of tasks. Range N/A

Table 4-991 TaskDetailInfo

Parameter	Type	Description
instance_id	String	Definition Instance ID, which is compliant with the UUID format. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range Instance name corresponding to the instance ID
instance_statuses	String	Definition Instance status. Range ● createfail: An instance failed to be created. ● creating: An instance is being created. ● normal: An instance is normal. ● abnormal: An instance is abnormal. ● deleted: An instance has been deleted.
job_id	String	Definition Task ID. Range N/A
order_id	String	Definition Order ID. Range N/A

Parameter	Type	Description
job_name	String	Definition Task name. Range • CreateGaussDBforMySQLInstance: creating a DB instance • RestoreGaussDBforMySQLNewInstance: restoring data to a new DB instance • AddGaussDBforMySQLNodes: adding nodes • DeleteGaussDBforMySQLNode: deleting nodes • RebootGaussDBforMySQLInstance: rebooting a DB instance • ModifyGaussDBforMySQLPort: changing a database port • ModifyGaussDBforMySQLSecurityGroup: changing a security group • ResizeGaussDBforMySQLFlavor: changing instance specifications • SwitchoverGaussDBforMySQLMaster-Node: promoting a read replica to primary • GaussDBforMySQLBindEIP: binding an EIP • GaussDBforMySQLUnbindEIP: unbinding an EIP • RenameGaussDBforMySQLInstance: changing a DB instance name • DeleteGaussDBforMySQLInstance: deleting a DB instance • UpgradeGaussDBforMySQLDatabaseVersion: upgrading an instance version • EnlargeGaussDBforMySQLProxy: adding nodes to a proxy instance • OpenGaussDBforMySQLProxy: enabling database proxy • CloseGaussDBforMySQLProxy: disabling database proxy • GaussdbforMySQLModifyProxyIp: changing a proxy address • ScaleGaussDBforMySQLProxy: changing the node specifications of a proxy instance • GaussDBforMySQLModifyInstanceMetricExtend: enabling or disabling Monitoring by Seconds

Parameter	Type	Description
		• GaussDBforMySQLModifyInstanceData-Vip: changing the private IP address • GaussDBforMySQLSwitchSSL: enabling or disabling SSL • GaussDBforMySQLModifyProxyConsist: changing the proxy consistency • GaussDBforMySQLModifyProxyWeight: changing the read weights of proxy nodes
status	String	Definition Task execution status. Range • Pending: The task is delayed and is not executed. • Running: The task is being executed. • Completed: The task is successfully executed. • Failed: The task failed to be executed.
process	String	Definition Task progress. Range N/A
created_time	String	Definition Time when a task was created. Range The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .
ended_time	String	Definition Task end time. Range The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 .

Parameter	Type	Description
fail_reason	String	Definition Task failure cause. Range N/A

Status code: 400

Table 4-992 Response body parameters

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

Status code: 500

Table 4-993 Response body parameters

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

Example Request

Obtaining the instant tasks

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/immediate-jobs
```

Example Response

Status code: 200

Success.

```
{
  "jobs" : [ {
    "instance_id" : "ede953923f06448d9be8686ef0c1378ein07",
    "instance_name" : "gauss-1234",
    "instance_status" : "deleted",
    "job_id" : "7155730b-a60b-4dc0-9f89-3f55897f29d6",
    "order_id" : "",
    "job_name" : "CloseGaussDBforMySQLProxy",
    "status" : "Completed",
    "process" : "",
    "created_time" : "2018-08-06T10:41:14+0000",
    "ended_time" : "2018-08-06T12:41:14+0000",
    "fail_reason" : "Single task exception."
  }
]
```

```
  } ],  
  "total_count" : 1  
}
```

Status Code

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

Error Code

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

4.13.3 Obtaining Scheduled Tasks

Function

This API is used to obtain the scheduled tasks. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/scheduled-jobs

Table 4-994 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-995 Query parameters

Parameter	Mandatory	Type	Description
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range ≥ 0 Default Value 0
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100

Parameter	Mandatory	Type	Description
status	No	String	Definition Task execution status. Constraints N/A Range • Running: The task is being executed. • Completed: The task is successfully executed. • Failed: The task failed to be executed. • Pending: The task is not executed. • Unauthorized: The task is to be authorized. • Canceled: The task is canceled. Default Value N/A
start_time	No	String	Definition Start time. Constraints The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
end_time	No	String	Definition End time. Constraints The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A Default Value N/A
job_id	No	String	Definition Task ID. Constraints N/A Range N/A Default Value N/A
job_name	No	String	Definition Task scheduling type. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-996 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-997** Response body parameters

Parameter	Type	Description
schedules	Array of ScheduleTask objects	Definition Task details.

Parameter	Type	Description
total_count	Integer	Definition Total number of records. Range N/A

Table 4-998 ScheduleTask

Parameter	Type	Description
job_id	String	Definition Task ID. Range N/A
instance_id	String	Definition Instance ID, which is compliant with the UUID format. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
instance_name	String	Definition Instance name. Range Instance name corresponding to the instance ID
instance_statuses	String	Definition Instance status. Range ● createfail: An instance failed to be created. ● creating: An instance is being created. ● normal: An instance is normal. ● abnormal: An instance is abnormal. ● deleted: An instance has been deleted.
project_id	String	Definition Project ID of a tenant in a region. Range ID of the project the instance belongs to.

Parameter	Type	Description
job_name	String	Definition Task name. Range • CreateGaussDBforMySQLInstance: creating a DB instance • RestoreGaussDBforMySQLNewInstance: restoring data to a new DB instance • AddGaussDBforMySQLNodes: adding nodes • DeleteGaussDBforMySQLNode: deleting nodes • RebootGaussDBforMySQLInstance: rebooting a DB instance • ModifyGaussDBforMySQLPort: changing a database port • ModifyGaussDBforMySQLSecurityGroup: changing a security group • ResizeGaussDBforMySQLFlavor: changing instance specifications • SwitchoverGaussDBforMySQLMaster-Node: promoting a read replica to primary • GaussDBforMySQLBindEIP: binding an EIP • GaussDBforMySQLUnbindEIP: unbinding an EIP • RenameGaussDBforMySQLInstance: changing a DB instance name • DeleteGaussDBforMySQLInstance: deleting a DB instance • UpgradeGaussDBforMySQLDatabaseVersion: upgrading an instance version • EnlargeGaussDBforMySQLProxy: adding nodes to a proxy instance • OpenGaussDBforMySQLProxy: enabling database proxy • CloseGaussDBforMySQLProxy: disabling database proxy • GaussdbforMySQLModifyProxyIp: changing a proxy address • ScaleGaussDBforMySQLProxy: changing the node specifications of a proxy instance • GaussDBforMySQLModifyInstanceMetricExtend: enabling or disabling Monitoring by Seconds

Parameter	Type	Description
		• GaussDBforMySQLModifyInstanceData-Vip: changing the private IP address • GaussDBforMySQLSwitchSSL: enabling or disabling SSL • GaussDBforMySQLModifyProxyConsist: changing the proxy consistency • GaussDBforMySQLModifyProxyWeight: changing the read weights of proxy nodes
create_time	String	Definition Task creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
start_time	String	Definition Task start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
end_time	String	Definition Task end time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Parameter	Type	Description
job_status	String	Definition Task execution status. Range • Pending: The task is delayed and is not executed. • Running: The task is being executed. • Completed: The task is successfully executed. • Failed: The task failed to be executed. • Unauthorized: The task is to be authorized. • Canceled: The task is canceled.
datastore_type	String	Definition Database type. Range N/A
target_config	Object	Definition Instance configuration information, such as specifications. Range N/A

Status code: 400**Table 4-999** Response body parameters

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

Status code: 500**Table 4-1000** Response body parameters

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

Example Request

Obtaining scheduled tasks

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/scheduled-jobs?offset=1&limit=10
```

Example Response

Status code: 200

Success.

```
{
  "schedules" : [ {
    "job_id" : "56d3c1138dcf4f1da73b0170700c78d0",
    "instance_id" : "79bc540dd4d6432784894a981fdacfcin07",
    "instance_name" : "gauss-f821",
    "instance_status" : "BUILD",
    "project_id" : "053f533ead80d5102f0cc012e8d468a4",
    "job_name" : "UpgradeGaussDBforMySQLDatabaseVersion",
    "create_time" : "2018-08-06T10:41:14+0000",
    "start_time" : "2018-08-06T10:41:14+0000",
    "end_time" : "2018-08-06T10:41:14+0000",
    "job_status" : "Completed",
    "datastore_type" : "gaussdb-mysql",
    "target_config" : {
      "flavor" : "gaussdb.mysql.xlarge.arm.4",
      "mem" : "16",
      "cpu" : "4"
    }
  } ],
  "total_count" : 1
}
```

Status Code

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

Error Code

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

4.13.4 Canceling a Scheduled Task

Function

This API is used to cancel a scheduled task. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
DELETE /v3/{project_id}/scheduled-jobs
```

Table 4-1001 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1002 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1003 Request body parameter

Parameter	Mandatory	Type	Description
job_ids	Yes	Array of strings	Definition IDs of tasks to be canceled. Constraints N/A

Response Parameters

Status code: 200

Table 4-1004 Response body parameter

Parameter	Type	Description
job_ids	Array of strings	Definition IDs of scheduled tasks that have been canceled.

Status code: 400

Table 4-1005 Response body parameters

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

Status code: 500

Table 4-1006 Response body parameters

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

Example Request

Canceling a scheduled task

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/scheduled-jobs
{
  "job_ids" : [ "56d3c1138dcf4f1da73b0170700c78d0" ]
}
```

Example Response

Status code: 200

Success.

```
{
  "job_ids" : [ "56d3c1138dcf4f1da73b0170700c78d0" ]
}
```

Status Code

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

Error Code

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

4.13.5 Deleting a Task Record

Function

This API is used to delete the record of a specific task. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/jobs/{job_id}

Table 4-1007 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
job_id	Yes	String	Definition Task ID. To obtain this value, see Obtaining Instant Tasks . Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-1008 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Success.

Status code: 400**Table 4-1009** Response body parameters

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

Status code: 500

Table 4-1010 Response body parameters

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

Example Request

Deleting a specified task record

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/jobs/6b00c41d-  
d54f-4bcb-80da-566ccedc2b5d
```

Example Response

Status code: 200

Success.

```
{}
```

Status Code

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

Error Code

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

4.13.6 Deleting a Scheduled Task Record

Function

This API is used to delete a scheduled task record. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
DELETE /v3/{project_id}/instance/{instance_id}/scheduled-jobs
```

Table 4-1011 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1012 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Table 4-1013 Request body parameter

Parameter	Mandatory	Type	Description
job_id	Yes	String	Definition Task ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1014 Response body parameter

Parameter	Type	Description
result	Boolean	Definition Deletion results. Range N/A

Status code: 400

Table 4-1015 Response body parameters

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

Status code: 500

Table 4-1016 Response body parameters

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

Example Request

Deleting a scheduled task record

```
DELETE https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instance/34cbc6c13e074761a0f893e9f30e6edfin07/scheduled-jobs
{
  "job_id" : "54c219a29a5f477ba69e36d0116d05d7"
}
```

Example Response

Status code: 200

Success.

```
{  
  "result" : true  
}
```

Status Code

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

Error Code

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

4.14 Intelligent Diagnosis

4.14.1 Querying Abnormal Instances by Each Metric

Function

This API is used to query abnormal instances by each metric. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/diagnosis-instance-count

Table 4-1017 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1018 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1019** Response body parameter

Parameter	Type	Description
diagnosis_info	Array of DiagnosisInfo objects	Definition Diagnosis information list.

Table 4-1020 DiagnosisInfo

Parameter	Type	Description
metric_name	String	Definition Metric name. Range N/A
count	Integer	Definition Number of instances. Range N/A

Status code: 400**Table 4-1021** Response body parameters

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

Status code: 500**Table 4-1022** Response body parameters

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

Example Request

Querying the number of abnormal instances by each metric based on **project_id**.

GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/diagnosis-instance-count

Example Response

Status code: 200

Success.

```
{  
  "diagnosis_info" : [{  
    "metric_name" : "high_pressure",
```



```
{
  "count" : 8
}, {
  "metric_name" : "insufficient_capacity",
  "count" : 0
}, {
  "metric_name" : "slow_sql_frequency",
  "count" : 0
}, {
  "metric_name" : "mem_overrun",
  "count" : 0
}, {
  "metric_name" : "connections_exceed",
  "count" : 0
}
}]
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.
500	Server error.

Error Code

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

4.14.2 Querying Abnormal Instance Information by a Specific Metric

Function

This API is used to abnormal instance information by a specific metric. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/diagnosis-instance-infos

Table 4-1023 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-1024 Query parameters

Parameter	Mandatory	Type	Description
metric_name	Yes	String	Definition Metric name. Constraints N/A Range • high_pressure: high vCPU utilization • insufficient_capacity: insufficient capacity • slow_sql_frequency: high-frequency slow SQL • mem_overrun: memory bottleneck • connections_exceed: too many connections Default Value N/A

Parameter	Mandatory	Type	Description
offset	Yes	Integer	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value cannot be a negative number. Range ≥ 0 Default Value 0
limit	Yes	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range 1–100 Default Value 100

Request Parameters

Table 4-1025 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1026 Response body parameters

Parameter	Type	Description
total_count	Integer	Definition Number of abnormal instances queried by the current metric. Range N/A
instance_infos	Array of InstanceInfoForDiagnosis objects	Definition Information about the abnormal instances.

Table 4-1027 InstanceInfoForDiagnosis

Parameter	Type	Description
instance_id	String	Definition Instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.

Parameter	Type	Description
master_node_id	String	Definition Primary node ID. Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed.

Status code: 400

Table 4-1028 Response body parameters

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

Status code: 500

Table 4-1029 Response body parameters

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

Example Request

Querying abnormal instance information based on **project_id** and a metric name (The information is displayed on multiple pages.)

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/diagnosis-instance-infos?metric_name=high_pressure&offset=0&limit=10
```

Example Response

Status code: 200

Success.

```
{
  "total_count" : 6,
  "instance_infos" : [ {
    "instance_id" : "6206d5be05914703938ff9dfe5c07d34in07",
    "master_node_id" : "7fe925aa8bab4cc9bac3990a94386c29no07"
  }, {
    "instance_id" : "cbdb32e08f0440158c4f2998dbf69b14in07",
    "master_node_id" : "3e90e7b99b964dca9704b3af903fcb41no07"
  }, {
```

```
{
  "instance_id" : "325af119c2ca4e77b1deb4810a9b921bin07",
  "master_node_id" : "f4dfb362039a45818e59416abc9a5ca6no07"
}, {
  "instance_id" : "9e8b52a5b6e84f4a9e4db01235b1c770in07",
  "master_node_id" : "408666cd6f104133ad0685b722f88cffno07"
}, {
  "instance_id" : "5814254f12f74d16bd0a93885b00867fin07",
  "master_node_id" : "637d96ffbf6745ff835445fe87d08fc5no07"
}, {
  "instance_id" : "d0da4882ebdf44bd9d3f1edf9b0bd4a2in07",
  "master_node_id" : "7a670f4ecdf14db5a4b5df737b0911a5no07"
}
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.
500	Server error.

Error Code

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

4.15 HTAP (Standard Edition)

4.15.1 Restoring a Data Synchronization Task for a StarRocks Instance

Function

This API is used to restore a data synchronization task for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/resume

Table 4-1030 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1031 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1032 Request body parameter

Parameter	Mandatory	Type	Description
task_name	Yes	String	Definition Synchronization task name. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1033 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for restoring data synchronization. Range N/A

Status code: 400

Table 4-1034 Response body parameters

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

Status code: 500

Table 4-1035 Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/resume
{
  "task_name" : "task_name"
}
```

Example Response

Status code: 200

Success

```
{
  "job_id" : "123"
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

Status Code	Description
200	Success
400	Client error.
500	Server error.

Error Code

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

4.15.2 Querying Tables of a Primary HTAP Instance

Function

This API is used to query data tables of a primary HTAP instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/htap/tables

Table 4-1036 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Standard HTAP instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1037 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints N/A Range N/A Default Value 100
offset	No	String	Definition Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. If the value is set to 0 , indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range N/A Default Value 0

Request Parameters

Table 4-1038 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1039 Request body parameters

Parameter	Mandatory	Type	Description
database_tables	No	Array of DatabaseTablesInfo objects	Definition List of database and table names of the primary instance to be retrieved. Constraints N/A Range N/A Default Value N/A
source_instance_id	No	String	Definition ID of the primary instance whose database is to be retrieved. The value is compliant with the UUID format. Constraints The value contains 36 characters. Only letters and digits are allowed. Range N/A Default Value N/A
selected_tables	No	Array of DatabaseTablesInfo objects	Definition Names of selected databases and tables. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
filter_type	No	String	Definition Table blacklist or whitelist. Constraints N/A Range • include_tables: whitelist • exclude_tables: blacklist Default Value N/A

Table 4-1040 DatabaseTablesInfo

Parameter	Mandatory	Type	Description
database	No	String	Definition Name of a database to be queried. Constraints Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A
tables	No	Array of strings	Definition Names of the data tables to be queried. Constraints Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1041 Response body parameters

Parameter	Type	Description
tables	Array of strings	Definition Table names. Default Value N/A
total_count	Integer	Definition Number of databases. Default Value N/A

Status code: 400**Table 4-1042** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Status code: 500**Table 4-1043** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

Querying the first 10 data tables of the instance whose ID is **1f6305e9ac4443b8a79f1bfd3a523002in07**

```
GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/htap/databases?limit=10&offset=1
```

```
{
  "database_tables": [ {
    "database": "sdk_test_db",
    "tables": [ "sdk_table_01" ]
  } ],
  "selected_tables": [ {
    "database": "sdk_test_db",
    "tables": [ "sdk_table_01" ]
  } ],
  "source_instance_id": "95fcf0a93a954354acb16a27de121155in07",
  "filter_type": "include_tables"
}
```

Example Response

Status code: 200

Success.

```
{
  "tables": [ "test_table1", "test_table2", "test_table3", "test_table4", "test_table5", "test_table6" ],
  "total_count": 6
}
```

Status code: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.3 Stopping a Data Synchronization Task for a StarRocks Instance

Function

This API is used to stop a data synchronization task for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/pause

Table 4-1044 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1045 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1046 Request body parameter

Parameter	Mandatory	Type	Description
task_name	Yes	String	Definition Synchronization task name. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1047 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for restoring data synchronization. Range N/A

Status code: 400

Table 4-1048 Response body parameters

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

Status code: 500

Table 4-1049 Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/pause
{
  "task_name" : "task_name"
}
```

Example Response

Status code: 200

Success

```
{
  "job_id" : "123"
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

Status Code	Description
200	Success
400	Client error.
500	Server error.

Error Code

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

4.15.4 Checking Table Configurations for HTAP Data Synchronization

Function

This API is used to check table configurations for HTAP data synchronization. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/table-config-check

Table 4-1050 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1051 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1052 Request body parameters

Parameter	Mandatory	Type	Description
source_instance_id	No	String	Definition TaurusDB instance ID. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
source_node_id	No	String	Definition TaurusDB read replica ID. Constraints N/A Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed. Default Value N/A
source_database_name	No	String	Definition TaurusDB database name. Constraints N/A Range The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
task_name	No	String	Definition Synchronization task name. Constraints N/A Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A
db_configs	No	Array of DbConfig objects	Definition Database configurations.
tables_configs	No	Array of TablesConfig objects	Definition Table configurations.
table_repl_config	No	TableReplConfig object	Definition Table synchronization configurations.
target_database_name	No	String	Definition Destination database name. Constraints N/A Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
is_create_task	No	String	Definition Whether to create a synchronization task. Constraints N/A Range • true • false Default Value N/A

Table 4-1053 DbConfig

Parameter	Mandatory	Type	Description
param_name	No	String	Definition Parameter name. Range N/A
value	No	String	Definition Parameter value. Range N/A

Table 4-1054 TablesConfig

Parameter	Mandatory	Type	Description
table_name	No	String	Definition Table name. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
table_config	No	String	Definition Table configuration value. Constraints order by, key columns, distributed by, partition by, data_model, buckets, replication_num, and enable_persistent_index are supported. If multiple operations are set at the same time, separate them with semicolons (;). For more operation syntax, see Getting Started with HTAP Standard Edition . Range N/A Default Value N/A

Table 4-1055 TableReplConfig

Parameter	Mandatory	Type	Description
repl_type	No	String	Definition Table synchronization type. Range • include_tables: whitelist • exclude_tables: blacklist
repl_scope	No	String	Definition Table synchronization scope. Range • all: all tables • part: some tables
tables	No	Array of strings	Definition Whitelisted or blacklisted tables.

Response Parameters

Status code: 200

Table 4-1056 Response body parameters

Parameter	Type	Description
source_database_name	String	Definition TaurusDB database name. Constraints The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A
target_database_name	String	Definition Destination database name. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A
tbl_config_check_results	Array of TableConfigCheckResult objects	Definition Table configuration check results. Constraints N/A Range N/A
task_name	String	Definition Synchronization task name. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A

Table 4-1057 TableConfigCheckResult

Parameter	Type	Description
table_name	String	Definition Table name. Range N/A
table_config	String	Definition Table configuration item. Range N/A
check_result	String	Definition Check results. Range success/failed

Status code: 400**Table 4-1058** Response body parameters

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

Status code: 500**Table 4-1059** Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/table-config-check
{
  "source_database_name": "source_database_name",
  "target_database_name": "target_database_name",
  "db_configs": [ {
    "param_name": "enable_chunk_level_dump",
```

```
"value" : "false"
}, {
  "param_name" : "snapshot_with_lock",
  "value" : "true"
}, {
  "param_name" : "sync_commit_interval_ms",
  "value" : "5000"
}, {
  "param_name" : "max_sync_commit_rows",
  "value" : "500000"
}, {
  "param_name" : "max_sync_commit_bytes",
  "value" : "268435456"
}, {
  "param_name" : "max_full_sync_task_threads_num",
  "value" : "1"
}, {
  "param_name" : "max_rows_per_chunk",
  "value" : "0"
}, {
  "param_name" : "max_bytes_per_chunk",
  "value" : "268435456"
}, {
  "param_name" : "binlog_expire_logs_seconds",
  "value" : "0"
} ],
"table_repl_config" : {
  "repl_type" : "include_tables",
  "repl_scope" : "all",
  "tables" : [ ]
},
"tables_configs" : {
  "table_name" : "tableName",
  "table_config" : "tableConfig"
},
"source_instance_id" : "source_instance_id",
"is_create_task" : "true",
"source_node_id" : "source_node_id"
}
```

Example Response

Status code: 200

Success.

```
{
  "source_database_name" : "source_database_name",
  "target_database_name" : "",
  "task_name" : "task",
  "tbl_config_check_results" : [ {
    "table_name" : "table",
    "table_config" : "order by id",
    "check_result" : "success"
  } ]
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.5 Creating a StarRocks Instance

Function

This API is used to create a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks

Table 4-1060 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition TaurusDB instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1061 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1062 Request body parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Definition Instance name. Instances of the same type can have the same name under the same tenant. Constraints N/A Range The name must start with a letter and consist of 4 to 64 characters. Only letters (case-sensitive), digits, hyphens (-), and underscores (_) are allowed. Chinese names are not supported. Default Value N/A
engine	Yes	engine object	Definition Engine information. Constraints N/A
ha	Yes	ha object	Definition Deployment information. Constraints N/A

Parameter	Mandatory	Type	Description
fe_flavor_id	Yes	String	Definition Specification ID of the frontend node. You can call the API Querying Specifications of an HTAP Instance to obtain the value. id in the response is the desired ID. Constraints N/A Range N/A Default Value N/A
be_flavor_id	Yes	String	Definition Specification ID of the backend node. You can call the API Querying Specifications of an HTAP Instance to obtain the value. id in the response is the desired ID. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
db_root_pwd	Yes	String	Definition Database password. Constraints N/A Range The password consists of 8 to 32 characters and contains at least three types of the following: uppercase letters, lowercase letters, digits, and special characters (~!@#\$\$%^*_-=+?,()& .). You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. If you enter a weak password, the system automatically determines that the password is invalid. Default Value N/A
fe_count	Yes	Integer	Definition Number of frontend nodes. Constraints N/A Range • The value is fixed to 1 for a single-node instance. • For a cluster instance, the value ranges from 3 to 10. Default Value N/A

Parameter	Mandatory	Type	Description
be_count	Yes	Integer	Definition Number of backend nodes. Constraints N/A Range - The value is fixed to 1 for a single-node instance. - For a cluster instance, the value ranges from 3 to 10. Default Value N/A
az_mode	Yes	String	Definition AZ mode. Range Currently, only single AZ is supported.
fe_volume	Yes	fe_volume object	Storage information of the frontend node.
be_volume	Yes	be_volume object	Storage information of the backend node.
az_code	Yes	String	AZ code.
time_zone	No	String	Definition Time zone. Range The default time zone is UTC +08:00.
tags_info	Yes	tags_info object	Tag information.
security_group_id	No	String	Definition Security group ID. By default, the value is the same as the ID of the security group associated with the TaurusDB instance. Range N/A
pay_info	No	pay_info object	Payment information. This parameter is mandatory for yearly/monthly billing.

Parameter	Mandatory	Type	Description
region_code	No	String	AZ. This parameter is mandatory for yearly/monthly billing.

Table 4-1063 engine

Parameter	Mandatory	Type	Description
type	Yes	String	Definition Engine type. Constraints N/A Range Only StarRocks is supported. Default Value N/A
version	Yes	String	Definition Major version number of the engine. To obtain this value, see Querying HTAP Engine Resources . Constraints N/A Range N/A Default Value N/A

Table 4-1064 ha

Parameter	Mandatory	Type	Description
mode	Yes	String	Definition Deployment mode. Constraints N/A Range • Single: single-node deployment • Cluster: cluster deployment Default Value N/A

Table 4-1065 fe_volume

Parameter	Mandatory	Type	Description
io_type	Yes	String	Storage type. Obtain the value from the message returned by Querying HTAP Engine Resources .
capacity_in_gb	Yes	Integer	Definition Storage space, in GB. Increment: 10 GB Range N/A

Table 4-1066 be_volume

Parameter	Mandatory	Type	Description
io_type	Yes	String	Storage type. To obtain this value, see Querying HTAP Engine Resources .
capacity_in_gb	Yes	Integer	Definition Storage space, in GB. Increment: 10 GB Range N/A

Table 4-1067 tags_info

Parameter	Mandatory	Type	Description
sys_tags	Yes	Array of sys_tags objects	System tags.

Table 4-1068 sys_tags

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

Table 4-1069 pay_info

Parameter	Mandatory	Type	Description
pay_model	No	String	Definition Billing mode. The default value is 0 . This parameter is mandatory for yearly/monthly billing. Range • 0: pay-per-use • 1: yearly/monthly
period	No	String	Yearly/monthly subscription period. This parameter is mandatory for yearly/monthly billing.
period_type	No	String	Definition Subscription period type. This parameter is mandatory for yearly/monthly billing. Range • 2: monthly • 3: yearly

Parameter	Mandatory	Type	Description
is_auto_renew	No	String	Definition Whether to automatically renew the yearly/monthly subscription. This parameter is mandatory for yearly/monthly billing. Range • 1: auto-renewal enabled • 0: auto-renewal disabled

Response Parameters

Status code: 201

Table 4-1070 Response body parameters

Parameter	Type	Description
instance	instance object	Instance information.
job_id	String	Workflow ID.

Table 4-1071 instance

Parameter	Type	Description
id	String	StarRocks instance ID, which is compliant with the UUID format.
az_code	String	AZ code.
az_mode	String	Definition AZ mode. Range single : single AZ multi : multiple AZs
name	String	Instance name.
engine	engine object	Engine information.
vpc_id	String	VPC ID.
security_group_id	String	Security group ID.

Parameter	Type	Description
sub_net_id	String	Subnet ID.
db_user	String	Database user. The default value is root .
port	Integer	Database port number. The default value is 3306 .
ha_mode	String	Deployment mode.
pay_info	pay_info object	Billing information.
enable_ssl	Boolean	Whether to enable SSL.
status	String	Instance status.
region	String	Region where the instance is deployed.
tags_info	tags_info object	Instance tags.

Table 4-1072 engine

Parameter	Type	Description
type	String	Engine type.
version	String	Major version number of the engine.

Table 4-1073 pay_info

Parameter	Type	Description
pay_model	String	Definition Billing mode. Range • 0: pay-per-use • 1: yearly/monthly Default Value StarRocks instances support only pay-per-use billing. The default value is 0 .
order_id	String	Yearly/monthly order ID.
period	String	Yearly/monthly subscription period.
period_type	String	Subscription period type.

Parameter	Type	Description
is_auto_renew	String	Whether to automatically renew the yearly/monthly subscription.

Table 4-1074 tags_info

Parameter	Type	Description
tags	Array of tags objects	User tags. This parameter is left blank by default.
sys_tags	Array of sys_tags objects	System tags.

Table 4-1075 tags

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

Table 4-1076 sys_tags

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

Status code: 400**Table 4-1077** Response body parameters

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

Status code: 500

Table 4-1078 Response body parameters

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

Example Request

Creating a DB instance

POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/
40dc4c5729f14aad893e2dcd5baf6a15in07/starrocks

```
{
  "name" : "htap-ff64",
  "engine" : {
    "type" : "star-rocks",
    "version" : "3.1"
  },
  "ha" : {
    "mode" : "Single"
  },
  "fe_flavor_id" : "afef3bfd-ac7c-32e1-ba44-c388acbb196a",
  "be_flavor_id" : "de565db8-0a96-37ea-9388-61167624712c",
  "db_root_pwd" : "Test@123!",
  "fe_count" : 1,
  "be_count" : 1,
  "az_mode" : "single",
  "fe_volume" : {
    "io_type" : "SSD",
    "capacity_in_gb" : 50
  },
  "be_volume" : {
    "io_type" : "SSD",
    "capacity_in_gb" : 50
  },
  "az_code" : "az",
  "time_zone" : "UTC+08:00",
  "tags_info" : {
    "sys_tags" : [ {
      "key" : "_sys_enterprise_project_id",
      "value" : "0"
    } ]
  }
}
```

Example Response

Status code: 201

Success.

```
{
  "instance" : {
    "id" : "590031445ef845bb912d7fc8243db80cin17",
    "az_code" : "az1",
    "az_mode" : "single",
    "name" : "htap-ff64",
    "engine" : {
      "type" : "star-rocks",
      "version" : "3.1"
    }
  },
}
```

```
"vpc_id" : "d5a1a29b-1476-490f-9682-c1a59593e7b0",
"security_group_id" : "967a0ac2-3cae-4e57-a49a-d0f6ff07dcc1",
"sub_net_id" : "2ce0bc80-bfc5-4d5e-9b78-a7f91572e03b",
"db_user" : "root",
"port" : 3306,
"ha_mode" : "Single",
"pay_info" : {
  "pay_model" : "0",
  "order_id" : null,
  "period" : null,
  "period_type" : null,
  "is_auto_renew" : null
},
"enable_ssl" : false,
"status" : "creating",
"region" : "az",
"tags_info" : {
  "tags" : [ ],
  "sys_tags" : [ {
    "key" : "_sys_enterprise_project_id",
    "value" : "0"
  } ]
},
"job_id" : "cf0b7506-1505-450f-9d95-ce9d93b6b5c3"
}
```

Status Code

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

Error Code

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

4.15.6 Querying a StarRocks Instance

Function

This API is used to query a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/{starrocks_instance_id}

Table 4-1079 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
starrocks_instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1080 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1081 Response body parameter

Parameter	Type	Description
instances	Array of instances objects	Definition StarRocks instance information.

Table 4-1082 instances

Parameter	Type	Description
id	String	Definition StarRocks instance ID, which is compliant with the UUID format. Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed.
name	String	Definition StarRocks instance name. Range N/A
project_id	String	Definition Project ID of a tenant in a region. Range N/A
public_ip	String	Definition Public IP address. Range N/A
data_vip	String	Definition Data IP address of the frontend node. Use commas (,) to separate multiple IP addresses. Range N/A

Parameter	Type	Description
can_enable_public_access	Boolean	Definition Whether the instance can be accessed from a public network. Range • true: The instance can be accessed from a public network. • false: The instance cannot be accessed from a public network.
current_backup_node_id	String	Definition ID of the backup node. Range N/A
cluster_mode	String	Definition Deployment mode. Range N/A
status	String	Definition Instance status. Range N/A
is_frozen	Integer	Definition Whether the instance is frozen. Range N/A
frozen_time	Long	Definition Frozen time. Range N/A
db_user	String	Definition Default username. Range N/A
bak_period	String	Definition Backup cycle. Range N/A

Parameter	Type	Description
bak_keep_day	Integer	Definition Backup retention days. Range N/A
bak_expected_start_time	Long	Definition Estimated backup start time. Range N/A
data_store_version_id	String	Definition DB version ID. Range N/A
data_store_version	String	Definition DB version. Range N/A
data_store_type	String	Definition DB engine. Range N/A
create_at	Long	Definition Time when an instance was created. Range N/A
update_at	Long	Definition Time when an instance was updated. Range N/A
delete_at	Long	Definition Time when an instance was deleted. Range N/A
db_port	String	Definition Database port. Range N/A

Parameter	Type	Description
param_group	String	Definition Parameter template. Range N/A
actions	Array of QueryAction objects	Definition Instance actions.
create_fail_error_code	String	Definition Error code for an instance creation failure. Range N/A
groups	Array of groups objects	Definition Instance groups.
ops_window	ops_window object	Definition Instance operation time window. Range N/A
tags_info	tags_info object	Definition Instance tags.
time_zone	String	Definition Time zone. Range N/A
backup_used_space	String	Definition Used backup space. Range N/A
az_mode	String	Definition AZ type. Range • single: single AZ • multi: multiple AZs
enterprise_project_id	String	Definition Enterprise project ID. Range N/A

Parameter	Type	Description
port_info	port_info object	Definition Port information.
fe_node_volume_code	String	Definition Storage type of the frontend node. Range N/A
be_node_volume_code	String	Definition Storage type of the backend node. Range N/A
fe_node_volume_size	String	Definition Storage space of the frontend node. Range N/A
be_node_volume_size	String	Definition Storage space of the backend node. Range N/A
support_data_replication	Boolean	Definition Whether data replication is supported. Range • true: Data replication is supported. • false: Data replication is not supported.
new_version_available	Boolean	Definition Whether there is a new DB version available. Range N/A
ssl_option	Boolean	Definition Whether to enable SSL. Range N/A
dedicated_resource_id	String	Definition Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool. Range N/A

Parameter	Type	Description
pay_model	String	Definition Payment method. Range N/A

Table 4-1083 groups

Parameter	Type	Description
id	String	Definition Group ID. Range N/A
name	String	Definition Group name. Range N/A
nodes	Array of nodes objects	Definition Instance node information. Range N/A
group_type_name	String	Definition Instance group type name. Range N/A
group_node_type	String	Definition Type of the node in the instance group. Range N/A

Table 4-1084 nodes

Parameter	Type	Description
id	String	Definition Instance node ID. Range N/A

Parameter	Type	Description
name	String	Definition Instance node name. Range N/A
type	String	Definition Instance node type. Range N/A
status	String	Definition Node status. Range • creating: A node is being created. • normal: A node is available. • abnormal: A node is abnormal. • createfail: A node failed to be created.
period	String	Definition Whether the instance node is billed on a yearly/monthly basis. 1 : The instance node is billed on a yearly/monthly basis. Range N/A
volume	volume object	Definition Instance node storage information. Range N/A
cpu	String	Definition vCPUs of the instance node. Range N/A
mem	String	Definition Memory size (GB) of the instance node. Range N/A
datastore	datastore object	Definition Database information. Range N/A

Parameter	Type	Description
actions	Array of QueryAction objects	Definition Node actions. Range N/A
priority	Integer	Definition Node priority. Range N/A
frozen_flag	Integer	Definition Frozen flag. Range N/A
db_port	Integer	Definition Database port. The default value is 3306 . Range N/A
pay_model	String	Definition Payment method. Range N/A
order_id	String	Definition Order ID. Range N/A
traffic_ip	String	Definition Data IP address. Range N/A
traffic_ipv6	String	Definition Data IPv6 address. Range N/A
az_code	String	Definition AZ code. Range N/A

Parameter	Type	Description
az_description	String	Definition AZ description. Range N/A
az_type	String	Definition AZ type. Range N/A
region_code	String	Definition Region where the instance is deployed. Range N/A
create_at	Long	Definition Time when a node was created. Range N/A
update_at	Long	Definition Time when a node was updated. Range N/A
flavor_id	String	Definition Node specification ID. Range N/A
flavor_ref	String	Definition Node specification code. Range N/A
iass_flavor_ref	String	Definition IaaS specification code. Range N/A

Parameter	Type	Description
max_connections	String	Definition Maximum number of public network connections. Range N/A
vpc_id	String	Definition VPC ID. Range N/A
subnet_id	String	Definition Subnet ID. Range N/A
need_restart	Boolean	Definition Whether a reboot is required for parameter updates. Range • true: A reboot is required. • false: A reboot is not required.
sg_id	String	Definition Security group. Range N/A
param_group	Map<String,ParameterGroup>	Definition Parameter template information. Range N/A

Table 4-1085 volume

Parameter	Type	Description
type	String	Definition Storage type of the instance node. Range N/A

Parameter	Type	Description
size	String	Definition Storage space of the instance node. Range N/A

Table 4-1086 datastore

Parameter	Type	Description
id	String	Definition Database ID. Range N/A
type	String	Definition Database type. Range N/A
version	String	Definition Database version. Range N/A

Table 4-1087 QueryAction

Parameter	Type	Description
id	String	Definition Instance or node action ID. Range N/A
action	String	Definition Instance or node action name. Range N/A
object_id	String	Definition Object ID of the instance or node action. Range N/A

Parameter	Type	Description
type	String	Definition Instance or node action type. Range N/A
job_id	String	Definition Task ID of the instance or node action. Range N/A
status	String	Definition Instance or node action status. Range N/A
created_at	Long	Definition Time when the instance or node action was created. Range N/A
updated_at	Long	Definition Time when the instance or node action was updated. Range N/A

Table 4-1088 ParamGroup

Parameter	Type	Description
id	String	Definition Parameter template ID. Range N/A
name	String	Definition Parameter template name. Range N/A

Table 4-1089 ops_window

Parameter	Type	Description
period	String	Definition Time window period. Range N/A
start_time	String	Definition Start time of the time window. Range N/A
end_time	String	Definition End time of the time window. Range N/A

Table 4-1090 tags_info

Parameter	Type	Description
tags	Array of tags objects	Definition User tags.
sys_tags	Array of sys_tags objects	Definition System tags.

Table 4-1091 tags

Parameter	Type	Description
key	String	Definition Tag key. Range The value can contain 1 to 128 characters. It cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed.

Parameter	Type	Description
value	String	Definition Tag value. Range The value can contain 0 to 255 Unicode characters. It can be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed.

Table 4-1092 sys_tags

Parameter	Type	Description
key	String	Definition Tag key. The value can contain a maximum of 36 Unicode characters. It cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed. Range N/A
value	String	Definition Tag value. The value contains a maximum of 43 Unicode characters. It can be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed. Range N/A

Table 4-1093 port_info

Parameter	Type	Description
mysql_port	Integer	Definition Port number. The default value is 3306 . Range N/A

Status code: 400

Table 4-1094 Response body parameters

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

Status code: 500**Table 4-1095** Response body parameters

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

Example Request

Querying the ID of a StarRocks instance

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
fb632d1d531a4107804f0f082581810fin07/starrocks/b6280c323ce449f2ad02af74e21f3dc5in17
```

Example Response

Status code: 200

Success.

```
{  
  "instances": [ {  
    "id": "914481def3574d5189baee926a26512din17",  
    "name": "htap-5d98",  
    "project_id": "23a50154cf494ec9ad6883979a12db0a",  
    "public_ip": "",  
    "data_vip": "192.168.8.4",  
    "can_enable_public_access": false,  
    "current_backup_node_id": null,  
    "cluster_mode": "Single",  
    "status": "normal",  
    "is_frozen": 0,  
    "frozen_time": null,  
    "db_user": "root",  
    "bak_period": null,  
    "bak_keep_day": null,  
    "bak_expected_start_time": null,  
    "data_store_version_id": "717b683b-9d89-3e3b-9100-7893bee47d95",  
    "data_store_version": "3.1.11.0",  
    "data_store_type": "star-rocks",  
    "create_at": 1716344516418,  
    "update_at": 1716347522157,  
    "delete_at": null,  
    "db_port": "3306",  
    "param_group": null,  
    "actions": [ ],  
    "create_fail_error_code": "500000",  
    "groups": [ {
```

```
"id" : "8d9d63263ece41619ba819f8d85c5cafgr17",
"name" : "htap-5d98_fe_shard01",
"nodes" : [ {
  "id" : "7739bfb4e244a8bac0662d63683c808no17",
  "name" : "htap-5d98_fe_shard01_node01",
  "type" : "fe-leader",
  "status" : "normal",
  "period" : "null",
  "volume" : {
    "type" : "SSD",
    "size" : "50000000000"
  },
  "cpu" : "4",
  "mem" : "16",
  "datastore" : {
    "id" : "717b683b-9d89-3e3b-9100-7893bee47d95",
    "type" : "star-rocks",
    "version" : "3.1.11.0"
  },
  "actions" : [ ],
  "priority" : 1,
  "frozen_flag" : 0,
  "db_port" : 3306,
  "pay_model" : "0",
  "order_id" : null,
  "traffic_ip" : "192.168.8.4",
  "traffic_ipv6" : "",
  "az_code" : "cn-southwest-244d",
  "az_description" : "az4",
  "az_type" : "Center",
  "region_code" : "cn-southwest-244",
  "create_at" : 1716344516418,
  "update_at" : 1716361751849,
  "flavor_id" : "afef3bfd-ac7c-32e1-ba44-c388acbb196a",
  "flavor_ref" : "gaussdb.sr-fe.xlarge.x86.4",
  "iass_flavor_ref" : "c6.xlarge.4",
  "max_connections" : "0",
  "vpc_id" : "f7876b94-3696-419b-a609-161de4b42d59",
  "subnet_id" : "09249318-4a97-4e48-b314-ffaab86d4295",
  "need_restart" : false,
  "sg_id" : "",
  "param_group" : null
} ],
"group_type_name" : "starrocks",
"group_node_type" : "fe"
}, {
  "id" : "fc416acdc4c1439e85100e9a7c161932gr17",
  "name" : "htap-5d98_be_shard01",
  "nodes" : [ {
    "id" : "ccab0ba176e642c69d598f2f3c0f06efno17",
    "name" : "htap-5d98_be_shard01_node01",
    "type" : "be",
    "status" : "normal",
    "period" : "null",
    "volume" : {
      "type" : "SSD",
      "size" : "50000000000"
    },
    "cpu" : "4",
    "mem" : "16",
    "datastore" : {
      "id" : "717b683b-9d89-3e3b-9100-7893bee47d95",
      "type" : "star-rocks",
      "version" : "3.1.11.0"
    },
    "actions" : [ ],
    "priority" : 1,
    "frozen_flag" : 0,
    "db_port" : 3306,
```

```
"pay_model" : "0",
"order_id" : null,
"traffic_ip" : "192.168.8.194",
"traffic_ipv6" : "",
"az_code" : "cn-southwest-244d",
"az_description" : "az4",
"az_type" : "Center",
"region_code" : "cn-southwest-244",
"create_at" : 1716344516418,
"update_at" : 1716358866767,
"flavor_id" : "de565db8-0a96-37ea-9388-61167624712c",
"flavor_ref" : "gaussdb.sr-be.xlarge.x86.4",
"iass_flavor_ref" : "c6.xlarge.4",
"max_connections" : "0",
"vpc_id" : "f7876b94-3696-419b-a609-161de4b42d59",
"subnet_id" : "09249318-4a97-4e48-b314-ffaab86d4295",
"need_restart" : false,
"sg_id" : "",
"param_group" : null
}],
"group_type_name" : "starrocks",
"group_node_type" : "be"
}],
"ops_window" : {
  "period" : null,
  "start_time" : "18:00",
  "end_time" : "22:00"
},
"tags_info" : {
  "tags" : [ ],
  "sys_tags" : [ {
    "key" : "_sys_enterprise_project_id",
    "value" : "0"
  } ]
},
"time_zone" : "UTC+08:00",
"backup_used_space" : null,
"az_mode" : "single",
"enterprise_project_id" : "0",
"port_info" : {
  "mysql_port" : 3306
},
"fe_node_volume_code" : "gaussdb.sr.evs.ultrahighio",
"be_node_volume_code" : "gaussdb.sr.evs.ultrahighio",
"fe_node_volume_size" : "50000000000",
"be_node_volume_size" : "50000000000",
"support_data_replication" : true,
"new_version_available" : false,
"ssl_option" : false,
"dedicated_resource_id" : null,
"pay_model" : "0"
} ]
}
```

Status Code

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

Error Code

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

4.15.7 Deleting a StarRocks Instance

Function

This API is used to delete a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/{starrocks_instance_id}

Table 4-1096 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	TaurusDB instance ID, which is compliant with the UUID format.
starrocks_instance_id	Yes	String	StarRocks instance ID, which is compliant with the UUID format.

Request Parameters

Table 4-1097 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1098 Response body parameter

Parameter	Type	Description
workflow_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-1099** Response body parameters

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

Status code: 500**Table 4-1100** Response body parameters

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

Example Request

Deleting a StarRocks instance

```
DELETE https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/
fb632d1d531a4107804f0f082581810fin07/starrocks/9ac58f9b88744f8a87893d22f6ef9a28in17
```

Example Response

Status code: 200

Success.

```
{
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"
}
```

Status Code

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

Error Code

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

4.15.8 Rebooting a StarRocks Instance

Function

This API is used to reboot a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{starrocks_instance_id}/starrocks/restart

Table 4-1101 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
starrocks_instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1102 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1103 Response body parameter

Parameter	Type	Description
workflow_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-1104** Response body parameters

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

Status code: 500**Table 4-1105** Response body parameters

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

Example Request

Rebooting a StarRocks instance

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/9ac58f9b88744f8a87893d22f6ef9a28in17/starrocks/restart
```

Example Response

Status code: 200

Success.

```
{
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"
}
```

Status Code

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

Error Code

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

4.15.9 Rebooting a StarRocks Node

Function

This API is used to reboot a StarRocks node. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{starrocks_instance_id}/starrocks/{starrocks_node_id}/restart

Table 4-1106 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
starrocks_node_id	Yes	String	Definition ID of a StarRocks instance node, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of no17 . Only letters and digits are allowed. Default Value N/A
starrocks_instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1107 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1108 Response body parameter

Parameter	Type	Description
workflow_id	String	Definition Workflow ID. Range N/A

Status code: 400**Table 4-1109** Response body parameters

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

Status code: 500**Table 4-1110** Response body parameters

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

Example Request

Rebooting a node of a StarRocks instance

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
9ac58f9b88744f8a87893d22f6ef9a28in17/starrocks/2c464fdbc8ea4c59814dab2243d8e270no17/restart
```

Example Response

Status code: 200

Success.

```
{  
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"  
}
```

Status Code

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

Error Code

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

4.15.10 Checking StarRocks Resources

Function

This API is used to check StarRocks resources. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/starrocks/resource-check

Table 4-1111 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1112 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1113 Request body parameters

Parameter	Mandatory	Type	Description
action	Yes	String	Definition Verification type. Only instance creation can be verified. Constraints N/A Range createInstance: pre-checking resources during instance creation Default Value N/A
resource	Yes	resource object	Resource information.

Table 4-1114 resource

Parameter	Mandatory	Type	Description
enterprise_project_id	Yes	String	Definition Enterprise project ID. Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_num	Yes	Integer	Definition Number of instances. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
mode	Yes	String	Definition Instance deployment mode. Constraints N/A Range • Cluster • Single Default Value N/A
availability_zone_mode	Yes	String	Definition AZ type. Currently, only Single is supported. Constraints N/A Range Single: single AZ Default Value N/A
fe_node_num	Yes	Integer	Definition Number of frontend nodes. Constraints N/A Range N/A Default Value N/A
be_node_num	Yes	Integer	Definition Number of backend nodes. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
fe_flavor_ref	Yes	String	Definition Specification code of the frontend node. To obtain this value, see Querying Specifications of an HTAP Instance . Constraints N/A Range N/A Default Value N/A
be_flavor_ref	Yes	String	Definition Specification code of the backend node. To obtain this value, see Querying Specifications of an HTAP Instance . Constraints N/A Range N/A Default Value N/A
availability_zone	No	String	Definition AZ code. This parameter is optional. The AZ code correctness is verified. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
subnet_id	Yes	String	Definition Subnet ID of the HTAP instance, that is, the subnet ID of the TaurusDB instance. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: Query the subnet ID through the VPC API. For details, see Querying Subnets. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1115 Response body parameter

Parameter	Type	Description
result	Boolean	Definition Check results. Range N/A

Status code: 400

Table 4-1116 Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 4-1117 Response body parameters

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

Example Request

Checking StarRocks instance resources

```
POST https://{endpoint}/v3/8f26bcd59e84e1d9e0569c32545cee9/starrocks/resource-check
{
  "action": "createInstance",
  "resource": {
    "instance_num": 1,
    "mode": "Cluster",
    "availability_zone_mode": "single",
    "fe_node_num": 3,
    "be_node_num": 3,
    "fe_flavor_ref": "gaussdb.sr-fe.8xlarge.x86.4",
    "be_flavor_ref": "gaussdb.sr-be.8xlarge.x86.4",
    "availability_zone": "cn-southwest-244a",
    "subnet_id": "b00dc497-91e1-4082-aeb0-a1dc95e10371",
    "enterprise_project_id": "0"
  }
}
```

Example Response

Status code: 200

Success.

```
{
  "result": true
}
```

Status Code

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

Error Code

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

4.15.11 Querying HTAP Engine Resources

Function

This API is used to query HTAP engine resources. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/htap/datastores/{engine_name}

Table 4-1118 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
engine_name	Yes	String	Definition HTAP engine type. Constraints N/A Range • star-rocks • click-house Default Value star-rocks

Request Parameters

Table 4-1119 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1120 Response body parameter

Parameter	Type	Description
datastores	Array of datastores objects	Definition Database list. Range N/A

Table 4-1121 datastores

Parameter	Type	Description
id	String	Definition DB version ID. The value is unique. Range N/A
name	String	Definition DB version number. Only the two-number major version is returned. Range N/A
kernel_version	String	Definition DB kernel version. A complete four-number version is returned. Range N/A

Status code: 400**Table 4-1122** Response body parameters

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

Status code: 500

Table 4-1123 Response body parameters

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

Example Request

Querying StarRocks DB version information

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/datastores/star-rock
```

Example Response

Status code: 200

Success.

```
{
  "datastores": [ {
    "id": "38197973-8895-36ed-b853-52daeefb6d3a",
    "name": "3.1",
    "kernel_version": "3.1.6.0"
  } ]
}
```

Status code: 400

Client error.

```
{
  "error_msg": "Invalid database type.",
  "error_code": "DBS.280235"
}
```

Status Code

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

Error Code

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

4.15.12 Obtaining the Storage Type of an HTAP Instance

Function

This API is used to obtain the storage type of an HTAP instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/htap/storage-type/{database}

Table 4-1124 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
database	Yes	String	Definition HTAP data engine type. Constraints N/A Range - star-rocks - click-house Default Value star-rocks

Table 4-1125 Query parameter

Parameter	Mandatory	Type	Description
version_name	Yes	String	Definition Major version of the HTAP database. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-1126 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1127 Response body parameter

Parameter	Type	Description
storage_type	Array of storage_type objects	Definition Storage type. Range N/A

Table 4-1128 storage_type

Parameter	Type	Description
name	String	Definition Name of the storage medium. Range N/A
az_status	Map<String,String>	Definition Whether the AZ is supported. Range N/A
min_volume_size	Integer	Definition Minimum disk size. Range N/A

Status code: 400**Table 4-1129** Response body parameters

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

Status code: 500**Table 4-1130** Response body parameters

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

Example Request

Querying the storage types available for a StarRocks instance

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/storage-type/star-rocks?
version_name=3.1.6.0
```

Example Response**Status code: 200**

Success.

```
{
  "storage_type": [ {
    "name": "ULTRAHIGH",
    "az_status": {
      "cn-southwest-244d": "normal",
      "cn-southwest-244c": "normal",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "normal"
    },
    "min_volume_size": 50
  }, {
    "name": "ESSD",
    "az_status": {
      "cn-southwest-244d": "unsupported",
      "cn-southwest-244c": "unsupported",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "normal"
    },
    "min_volume_size": 40
  } ]
}
```

Status code: 400

Client error.


```
{
  "error_msg": "The DB engine or version is not supported.",
  "error_code": "DBS.280238"
}
```

Status Code

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

Error Code

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

4.15.13 Querying Specifications of an HTAP Instance

Function

This API is used to query specifications of an HTAP instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/htap/flavors/{engine_name}

Table 4-1131 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
engine_name	Yes	String	Definition HTAP engine type. Constraints N/A Range - star-rocks - click-house Default Value star-rocks

Table 4-1132 Query parameter

Parameter	Mandatory	Type	Description
availability_zone_mode	No	String	Definition AZ type. Constraints N/A Range Only single is supported. Default Value single
spec_code	No	String	Definition Specification code. If this parameter is specified, only the specified specification code is queried. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
version_name	No	String	Definition HTAP database version. Constraints N/A Range N/A Default Value 3.1.6.0

Request Parameters

Table 4-1133 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1134 Response body parameter

Parameter	Type	Description
flavors	Array of flavors objects	Definition Specification information. Range N/A

Table 4-1135 flavors

Parameter	Type	Description
type	String	Definition CPU architecture. Range The value can be arm , x86 , or generalX86 . arm: exclusive Arm x86: exclusive x86 generalX86: general-purpose x86
vcpus	String	Definition Number of vCPUs. For example, the value 1 indicates 1 vCPU. Range N/A

Parameter	Type	Description
ram	String	Definition Memory size, in GB. Range N/A
id	String	Definition Specification ID. The value is unique. Range N/A
spec_code	String	Definition Resource specification code. Its value is same as the value of flavor_ref . Example: gaussdb.sr-be.xlarge.x86.4 gaussdb.sr indicates the product. xlarge indicates the compute specifications (4 vCPUs). x86 indicates the x86 architecture. 4 indicates the ratio of vCPUs to memory is 1:4. Range N/A
version_name	String	Definition DB version number. Range N/A
instance_mode	String	Definition Instance type. The value can be Cluster or Single . Range N/A
az_status	Map<String,String>	Definition Specification status in an AZ. Range • normal: The specifications are available in the AZ. • unsupported: The specifications are not supported. • sellout: The specifications are sold out.

Status code: 400**Table 4-1136** Response body parameters

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

Status code: 500**Table 4-1137** Response body parameters

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

Example Request

Querying StarRocks specifications

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/flavors/star-rocks?availability_zone_mode=single
```

Example Response**Status code: 200**

Success.

```
{
  "flavors": [ {
    "type": "x86",
    "vcpus": "4",
    "ram": "16",
    "id": "de565db8-0a96-37ea-9388-61167624712c",
    "spec_code": "gaussdb.sr-be.xlarge.x86.4",
    "version_name": "8.0",
    "instance_mode": "Cluster",
    "az_status": {
      "az1": "normal",
      "az2": "normal",
      "az3": "normal",
      "az4": "unsupported"
    }
  }, {
    "type": "x86",
    "vcpus": "4",
    "ram": "16",
    "id": "afef3bfd-ac7c-32e1-ba44-c388acbb196a",
    "spec_code": "gaussdb.sr-fe.xlarge.x86.4",
    "version_name": "8.0",
    "instance_mode": "Cluster",
    "az_status": {
      "az1": "normal",
```

```
    "az2" : "normal",
    "az3" : "normal",
    "az4" : "unsupported"
  }, {
    "type" : "x86",
    "vcpus" : "8",
    "ram" : "32",
    "id" : "c50e8e15-f2fc-3b40-aca6-c98f07ce2ce0",
    "spec_code" : "gaussdb.sr-be.2xlarge.x86.4",
    "version_name" : "8.0",
    "instance_mode" : "Cluster",
    "az_status" : {
      "az1" : "normal",
      "az2" : "normal",
      "az3" : "normal",
      "az4" : "unsupported"
    }
  }, {
    "type" : "x86",
    "vcpus" : "8",
    "ram" : "32",
    "id" : "24059750-4280-3ee5-a44b-488b924633b4",
    "spec_code" : "gaussdb.sr-fe.2xlarge.x86.4",
    "version_name" : "8.0",
    "instance_mode" : "Cluster",
    "az_status" : {
      "az1" : "normal",
      "az2" : "normal",
      "az3" : "normal",
      "az4" : "unsupported"
    }
  }, {
    "type" : "x86",
    "vcpus" : "16",
    "ram" : "64",
    "id" : "a48c63dc-5563-3813-9e13-39d3301e56f4",
    "spec_code" : "gaussdb.sr-be.4xlarge.x86.4",
    "version_name" : "8.0",
    "instance_mode" : "Cluster",
    "az_status" : {
      "az1" : "normal",
      "az2" : "normal",
      "az3" : "normal",
      "az4" : "unsupported"
    }
  }, {
    "type" : "x86",
    "vcpus" : "16",
    "ram" : "64",
    "id" : "0ef44c01-f7a1-30f5-9f05-9e47094e8c1f",
    "spec_code" : "gaussdb.sr-fe.4xlarge.x86.4",
    "version_name" : "8.0",
    "instance_mode" : "Cluster",
    "az_status" : {
      "az1" : "normal",
      "az2" : "normal",
      "az3" : "normal",
      "az4" : "unsupported"
    }
  }, {
    "type" : "x86",
    "vcpus" : "32",
    "ram" : "128",
    "id" : "2bf6aa50-50da-3f27-91af-a8c873070537",
    "spec_code" : "gaussdb.sr-fe.8xlarge.x86.4",
    "version_name" : "8.0",
    "instance_mode" : "Cluster",
    "az_status" : {
```

```
{
  "az1": "normal",
  "az2": "normal",
  "az3": "normal",
  "az4": "normal"
}, {
  "type": "x86",
  "vcpus": "32",
  "ram": "128",
  "id": "9f52a065-aa93-371a-9975-959fedf6e24f",
  "spec_code": "gaussdb.sr-be.8xlarge.x86.4",
  "version_name": "8.0",
  "instance_mode": "Cluster",
  "az_status": {
    "az1": "normal",
    "az2": "normal",
    "az3": "normal",
    "az4": "normal"
  }
}, {
  "type": "x86",
  "vcpus": "64",
  "ram": "256",
  "id": "709822e4-567f-3e85-b4af-cb099206c8e2",
  "spec_code": "gaussdb.sr-fe.16xlarge.x86.4",
  "version_name": "8.0",
  "instance_mode": "Cluster",
  "az_status": {
    "az1": "normal",
    "az2": "normal",
    "az3": "normal",
    "az4": "unsupported"
  }
}, {
  "type": "x86",
  "vcpus": "64",
  "ram": "256",
  "id": "4e56e208-0226-34bb-b84d-035ab0497824",
  "spec_code": "gaussdb.sr-be.16xlarge.x86.4",
  "version_name": "8.0",
  "instance_mode": "Cluster",
  "az_status": {
    "az1": "normal",
    "az2": "normal",
    "az3": "normal",
    "az4": "unsupported"
  }
}
}]
}
```

Status code: 400

Client error.

```
{
  "error_msg": "Invalid specification code.",
  "error_code": "DBS.280434"
}
```

Status Code

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

Error Code

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

4.15.14 Querying HTAP Instances

Function

This API is used to query HTAP instances. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/htap

Table 4-1138 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition TaurusDB instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1139 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1140 Response body parameters

Parameter	Type	Description
total	Integer	Definition Number of HTAP instances. Range N/A
instances	Array of instances objects	Definition HTAP instance information. Range N/A
max_htap_instance_num_of_taurus	Integer	Definition Maximum number of HTAP instances that can be created. Range N/A

Table 4-1141 instances

Parameter	Type	Description
id	String	Definition HTAP instance ID, which is compliant with the UUID format. Range N/A
name	String	Definition HTAP instance name. Range N/A
engine_name	String	Definition HTAP DB engine name. Range N/A
engine_version	String	Definition HTAP DB engine version. Range N/A

Parameter	Type	Description
project_id	String	Definition Project ID of a tenant in a region. Range N/A
instance_state	instance_state object	Definition HTAP instance status information. Range N/A
create_at	Long	Definition Time when the HTAP instance was created. Range N/A
is_frozen	Boolean	Definition Whether the HTAP instance is frozen. Range N/A
ha_mode	String	Definition HTAP instance deployment mode. Range N/A
pay_model	String	Definition Billing mode. Only pay-per-use billing is supported. Range 0: pay-per-use 1: yearly/monthly
order_id	String	Definition Order ID for the yearly/monthly subscription. Range N/A
alter_order_id	String	Definition Alternative order ID for the yearly/monthly subscription. Range N/A

Parameter	Type	Description
data_vip	String	Definition Private IP address. Range N/A
readable_node_infos	Array of ReadableNodeInfos objects	Definition Readable node information. Range N/A
proxy_ips	Array of strings	Definition Proxy IP addresses. Range N/A
data_vip_v6	String	Definition Private IPv6 address. Range N/A
port	Integer	Definition Database port. Range N/A
available_zones	Array of available_zones objects	Definition AZ information. Range N/A
current_actions	Array of QueryAction objects	Definition Instance actions. Range N/A
volume_type	String	Definition Storage type. Range N/A
server_type	String	Definition Server type. Range N/A

Parameter	Type	Description
enterprise_project_id	String	Definition Enterprise project ID. This parameter is mandatory when the enterprise project is enabled. Range N/A
dedicated_resource_id	String	Definition Dedicated resource pool ID. This parameter is only available when the dedicated resource pool is enabled. Range N/A
network	network object	Definition Network information. Range N/A
ch_master_node_id	String	Definition ClickHouse primary node ID. Range N/A
node_num	Integer	Definition Number of nodes. Range N/A

Table 4-1142 instance_state

Parameter	Type	Description
instance_status	String	Definition HTAP instance status. Range N/A
create_fail_error_code	String	Definition Error code for HTAP instance creation failures. Range N/A

Parameter	Type	Description
fail_message	String	Definition Error message for HTAP instance creation failures. Range N/A
wait_restart_f or_params	Boolean	Definition Whether a reboot is required for parameter updates. Range N/A

Table 4-1143 ReadableNodeInfos

Parameter	Type	Description
data_ip	String	Definition IP address of the readable node. Constraints N/A Range N/A Default Value N/A
node_id	String	Definition ID of the readable node. Constraints N/A Range N/A Default Value N/A

Parameter	Type	Description
node_name	String	Definition Name of the readable node. Constraints N/A Range N/A Default Value N/A

Table 4-1144 available_zones

Parameter	Type	Description
code	String	Definition AZ code. Range N/A
description	String	Definition AZ description. Range N/A
az_type	String	Definition AZ type. Range N/A

Table 4-1145 QueryAction

Parameter	Type	Description
id	String	Definition Instance or node action ID. Range N/A
action	String	Definition Instance or node action name. Range N/A

Parameter	Type	Description
object_id	String	Definition Object ID of the instance or node action. Range N/A
type	String	Definition Instance or node action type. Range N/A
job_id	String	Definition Task ID of the instance or node action. Range N/A
status	String	Definition Instance or node action status. Range N/A
created_at	Long	Definition Time when the instance or node action was created. Range N/A
updated_at	Long	Definition Time when the instance or node action was updated. Range N/A

Table 4-1146 network

Parameter	Type	Description
vpc_id	String	Definition VPC ID. Range N/A

Parameter	Type	Description
sub_net_id	String	Definition Subnet ID. Range N/A
security_group_id	String	Definition Security group ID. Range N/A

Status code: 400

Table 4-1147 Response body parameters

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

Status code: 500

Table 4-1148 Response body parameters

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

Example Request

Querying HTAP instances of a TaurusDB instance

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/18c3eeb7b788479eb8b93b209946a83bin07/htap
```

Example Response

Status code: 200

Success.

```
{
  "total" : 2,
  "instances" : [ {
    "id" : "5fbd54b94f0f4adbb17f728f581d247ein17",
```

```
"name" : "htap-1f05",
"engine_name" : "star-rocks",
"engine_version" : "3.1.11",
"project_id" : "23a50154cf494ec9ad6883979a12db0a",
"instance_state" : {
  "instance_status" : "normal",
  "create_fail_error_code" : null,
  "fail_message" : null,
  "wait_restart_for_params" : false
},
"create_at" : 1716364704475,
"is_frozen" : false,
"ha_mode" : "Cluster",
"pay_model" : "0",
"order_id" : null,
"alter_order_id" : "",
"data_vip" : "192.168.8.69,192.168.8.28,192.168.8.91",
"readable_node_infos" : [ {
  "data_ip" : "192.168.8.69",
  "node_id" : "48e89b523de54a168bdd5ce0d6c134f0no17",
  "node_name" : "htap-1f05_fe_shard01_node01"
}, {
  "data_ip" : "192.168.8.28",
  "node_id" : "70bcbaef85164a299188cc6798de67f6no17",
  "node_name" : "htap-1f05_fe_shard01_node02"
}, {
  "data_ip" : "192.168.8.91",
  "node_id" : "f50fdf0c1e7447b3bca7d9eefe9d4a30no17",
  "node_name" : "htap-1f05_fe_shard01_node03"
} ],
"proxy_ips" : [ ],
"data_vip_v6" : null,
"port" : 3306,
"available_zones" : [ {
  "code" : "cn-southwest-244d",
  "description" : "az4",
  "az_type" : "Center"
} ],
"current_actions" : [ ],
"volume_type" : "SSD",
"server_type" : "KVM",
"enterprise_project_id" : "0",
"dedicated_resource_id" : "",
"network" : {
  "vpc_id" : "f7876b94-3696-419b-a609-161de4b42d59",
  "sub_net_id" : "09249318-4a97-4e48-b314-ffaab86d4295",
  "security_group_id" : ""
},
"ch_master_node_id" : null,
"node_num" : 6
}, {
  "id" : "914481def3574d5189baee926a26512din17",
  "name" : "htap-5d98",
  "engine_name" : "star-rocks",
  "engine_version" : "3.1.11",
  "project_id" : "23a50154cf494ec9ad6883979a12db0a",
  "instance_state" : {
    "instance_status" : "normal",
    "create_fail_error_code" : "500000",
    "fail_message" : null,
    "wait_restart_for_params" : false
  },
  "create_at" : 1716344516418,
  "is_frozen" : false,
  "ha_mode" : "Single",
  "pay_model" : "0",
  "order_id" : null,
  "alter_order_id" : "",
  "data_vip" : "192.168.8.4",
```

```
"readable_node_infos" : [ {
  "data_ip" : "192.168.8.4",
  "node_id" : "7739bfb4e244a8bac0662d63683c808no17",
  "node_name" : "htap-5d98_fe_shard01_node01"
} ],
"proxy_ips" : [ ],
"data_vip_v6" : null,
"port" : 3306,
"available_zones" : [ {
  "code" : "cn-southwest-244d",
  "description" : "az4",
  "az_type" : "Center"
} ],
"current_actions" : [ ],
"volume_type" : "SSD",
"server_type" : "KVM",
"enterprise_project_id" : "0",
"dedicated_resource_id" : "",
"network" : {
  "vpc_id" : "f7876b94-3696-419b-a609-161de4b42d59",
  "sub_net_id" : "09249318-4a97-4e48-b314-ffaab86d4295",
  "security_group_id" : ""
},
"ch_master_node_id" : null,
"node_num" : 2
} ],
"max_htap_instance_num_of_taurus" : 10
}
```

Status Code

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

Error Code

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

4.15.15 Creating a Data Synchronization Task for a StarRocks Instance

Function

This API is used to create a data synchronization task for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

Table 4-1149 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1150 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	Yes	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1151 Request body parameters

Parameter	Mandatory	Type	Description
source_instance_id	Yes	String	Definition ID of the TaurusDB instance in the synchronization task to be created. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
source_node_id	No	String	Definition ID of the TaurusDB read replica in the synchronization task to be created. Constraints N/A Range N/A Default Value N/A
source_database	Yes	String	Definition Name of the source database in the synchronization task to be created. Constraints The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A
target_database	Yes	String	Definition Name of the destination database in the synchronization task to be created. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
task_name	Yes	String	Definition Name of the synchronization task to be created. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1152 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the data synchronization task. Range N/A

Status code: 400

Table 4-1153 Response body parameters

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

Status code: 500

Table 4-1154 Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication
{
  "source_instance_id" : "source_instance_id",
  "source_node_id" : "source_node_id",
  "source_database" : "source_database",
  "target_database" : "target_database",
  "task_name" : "task_name"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "123"
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.16 Deleting a Data Synchronization Task for a StarRocks Instance

Function

This API is used to delete a data synchronization task for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

Table 4-1155 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1156 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1157 Request body parameter

Parameter	Mandatory	Type	Description
task_name	No	String	Definition Name of the data synchronization task. The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A

Response Parameters

Status code: 200

Table 4-1158 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for deleting the synchronization task. Range N/A

Status code: 400

Table 4-1159 Response body parameters

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

Status code: 500

Table 4-1160 Response body parameters

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

Example Request

```
DELETE https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication
{
  "task_name": "task_name"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id": "123"
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.17 Querying Data Synchronization Tasks of a StarRocks Instance

Function

This API is used to query data synchronization tasks of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

Table 4-1161 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1162 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints The value must be an integer and cannot be a negative number. Range 1-100 Default Value 100
offset	No	String	Definition Index offset. The query starts from the next piece of data indexed by this parameter. Constraints The value must be an integer and cannot be a negative number. Range 0 or a positive integer Default Value 0

Request Parameters

Table 4-1163 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1164** Response body parameters

Parameter	Type	Description
total_count	String	Definition Total number of data synchronization tasks. Range N/A

Parameter	Type	Description
replications	Array of StarRocksReplicationInfo objects	Definition Information about data synchronization tasks. Range N/A
ext_text	String	Definition Extended field. Range N/A

Table 4-1165 StarRocksReplicationInfo

Parameter	Type	Description
source_database	String	Definition TaurusDB database. Range The value can contain 3 to 1,024 characters.
target_database	String	Definition Destination database. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
task_name	String	Definition Synchronization task name. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
status	String	Definition Current status. Range Yes: normal; No: abnormal

Parameter	Type	Description
stage	String	Definition Synchronization stage. Range • wait: waiting for synchronization • incremental: incremental synchronization • full: full synchronization • cancelled: synchronization cancelled • paused: synchronization paused
percentage	String	Definition Progress percentage. Range N/A
catchup_stage	String	Definition Catchup stage. Range • wait: waiting for synchronization • incremental: incremental synchronization • full: full synchronization • cancelled: synchronization cancelled • paused: synchronization paused
catchup_percentage	String	Definition Catchup progress percentage. Range N/A

Status code: 400**Table 4-1166** Response body parameters

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

Status code: 500

Table 4-1167 Response body parameters

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

Example Request

Querying the first 10 synchronization tasks on the first page

```
GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication?offset=1&limit=10
```

Example Response

Status code: 200

Success.

```
{
  "total_count": 1,
  "replications": [ {
    "source_database": "source_database",
    "target_database": "target_database",
    "task_name": "task_name",
    "status": "Yes",
    "stage": "Incremental",
    "percentage": 100,
    "catchup_stage": null,
    "catchup_percentage": 0
  } ],
  "ext_text": null
}
```

Status code: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.18 Modifying StarRocks Data Synchronization Configurations

Function

This API is used to modify StarRocks data synchronization configurations. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

Table 4-1168 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1169 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1170 Request body parameters

Parameter	Mandatory	Type	Description
source_instance_id	No	String	Definition TaurusDB instance ID. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A
source_node_id	No	String	Definition TaurusDB read replica ID. Constraints N/A Range The value contains 36 characters with a suffix of no07 . Only letters and digits are allowed. Default Value N/A
source_database_name	No	String	Definition TaurusDB database name. Constraints N/A Range The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
task_name	No	String	Definition Name of the data synchronization task. Constraints N/A Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A
db_configs	No	Array of DbConfig objects	Definition Database configurations. Constraints N/A Range N/A Default Value N/A
tables_configs	No	Array of TablesConfig objects	Definition Table configurations. Constraints N/A Range N/A Default Value N/A
table_repl_config	No	TableReplConfig object	Definition Table synchronization configurations. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
target_database_name	No	String	Definition Destination database name. Constraints N/A Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Default Value N/A
is_instance_level_sync	No	String	Definition Whether instance-level synchronization is supported. Constraints N/A Range • true: yes • false: no Default Value false
database_replication_scope	No	String	Definition Database synchronization scope. Constraints N/A Range • all: All databases are synchronized. • part: Some databases are synchronized. Default Value part

Parameter	Mandatory	Type	Description
is_support_reg_exp	No	String	Definition Whether wildcards are supported. Constraints N/A Range • true: yes • false: no Default Value false

Table 4-1171 DbConfig

Parameter	Mandatory	Type	Description
param_name	No	String	Definition Parameter name. Range N/A
value	No	String	Definition Parameter value. Range N/A

Table 4-1172 TablesConfig

Parameter	Mandatory	Type	Description
table_name	No	String	Definition Table name. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
table_config	No	String	Definition Table configuration value. Constraints order by, key columns, distributed by, partition by, data_model, buckets, replication_num, and enable_persistent_index are supported. If multiple operations are set at the same time, separate them with semicolons (;). For more operation syntax, see Getting Started with HTAP Standard Edition . Range N/A Default Value N/A

Table 4-1173 TableReplConfig

Parameter	Mandatory	Type	Description
repl_type	No	String	Definition Table synchronization type. Range • include_tables: whitelist • exclude_tables: blacklist
repl_scope	No	String	Definition Table synchronization scope. Range • all: all tables • part: some tables
tables	No	Array of strings	Definition Whitelisted or blacklisted tables.

Response Parameters

Status code: 200

Table 4-1174 Response body parameters

Parameter	Type	Description
source_database_name	String	Definition TaurusDB database name. Range The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
target_database_name	String	Definition Destination database name. Range The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
source_db_config_check_results	Array of DbConfigCheckResult objects	Definition Check results of the TaurusDB database configurations. Range N/A
tbl_config_check_results	Array of TableConfigCheckResult objects	Definition Table configuration check results. Range N/A
task_name	String	Definition Synchronization task name. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
job_id	String	Definition ID of the workflow for modifying synchronization configurations. Range N/A

Table 4-1175 DbConfigCheckResult

Parameter	Type	Description
param_name	String	Definition Parameter name. Range The value can contain 3 to 128 characters.
value	String	Definition Parameter value. Range The value can contain 1 to 64 characters.
check_result	String	Definition Check results. Range • success • fail

Table 4-1176 TableConfigCheckResult

Parameter	Type	Description
table_name	String	Definition Table name. Range N/A
table_config	String	Definition Table configuration item. Range N/A
check_result	String	Definition Check results. Range • success • failed

Status code: 400

Table 4-1177 Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Status code: 500**Table 4-1178** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

PUT https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

```
{
  "source_database_name": "source_database_name",
  "target_database_name": "target_database_name",
  "db_configs": [ {
    "param_name": "enable_chunk_level_dump",
    "value": "false"
  }, {
    "param_name": "snapshot_with_lock",
    "value": "true"
  }, {
    "param_name": "sync_commit_interval_ms",
    "value": "5000"
  }, {
    "param_name": "max_sync_commit_rows",
    "value": "500000"
  }, {
    "param_name": "max_sync_commit_bytes",
    "value": "268435456"
  }
]
```

```
{
  {
    "param_name": "max_full_sync_task_threads_num",
    "value": "1"
  }, {
    "param_name": "max_rows_per_chunk",
    "value": "0"
  }, {
    "param_name": "max_bytes_per_chunk",
    "value": "268435456"
  }, {
    "param_name": "binlog_expire_logs_seconds",
    "value": "0"
  } ],
  "table_repl_config": {
    "repl_type": "include_tables",
    "repl_scope": "all",
    "tables": [ ]
  },
  "tables_configs": {
    "table_name": "tableName",
    "table_config": "tableConfig"
  },
  "source_instance_id": "source_instance_id",
  "is_create_task": "true",
  "source_node_id": "source_node_id"
}
```

Example Response

Status code: 200

Success.

```
{
  "source_database_name": "source_database_name",
  "target_database_name": "target_database_name",
  "job_id": "job_id",
  "task_name": "task",
  "tbl_config_check_results": [ {
    "table_name": "table",
    "table_config": "order by id",
    "check_result": "success"
  } ],
  "source_db_config_check_results": [ {
    "param_name": "enable_chunk_level_dump",
    "value": "false",
    "check_result": "success"
  }, {
    "param_name": "snapshot_with_lock",
    "value": "true",
    "check_result": "success"
  } ]
}
```

Status code: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.19 Checking Database Configurations for HTAP Data Synchronization

Function

This API is used to check database configurations for HTAP data synchronization. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/database-config-check

Table 4-1179 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1180 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1181 Request body parameters

Parameter	Mandatory	Type	Description
source_instance_id	No	String	Definition TaurusDB instance ID. Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed.
source_node_id	No	String	Definition TaurusDB read replica ID. Range The value contains 36 characters, starting with a UUID and ending with no07 . Only letters and digits are allowed.
source_database_name	No	String	Definition Name of the TaurusDB database. Range The value can contain 3 to 1,024 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.

Parameter	Mandatory	Type	Description
target_database_name	No	String	Definition Name of the destination database. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
task_name	No	String	Definition Synchronization task name. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
db_configs	No	Array of DbConfig objects	Definition Database configurations.
table_repl_config	No	TableReplConfig object	Definition Table configurations.

Table 4-1182 DbConfig

Parameter	Mandatory	Type	Description
param_name	No	String	Definition Parameter name. Range N/A
value	No	String	Definition Parameter value. Range N/A

Table 4-1183 TableReplConfig

Parameter	Mandatory	Type	Description
repl_type	No	String	Definition Table synchronization type. Range • include_tables: whitelist • exclude_tables: blacklist
repl_scope	No	String	Definition Table synchronization scope. Range • all: all tables • part: some tables
tables	No	Array of strings	Definition Whitelisted or blacklisted tables.

Response Parameters

Status code: 200

Table 4-1184 Response body parameters

Parameter	Type	Description
source_database_name	String	Definition Name of the destination database. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
source_db_config_check_results	Array of DbConfigCheckResult objects	Definition Check results of the TaurusDB database configurations.
target_database_name	String	Definition Name of the destination database. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.

Parameter	Type	Description
target_db_config_check_results	Array of DbConfigCheckResult objects	Definition Check results of the destination database configurations.
task_name	String	Definition Synchronization task name. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.

Table 4-1185 DbConfigCheckResult

Parameter	Type	Description
param_name	String	Definition Parameter name. Range The value can contain 3 to 128 characters.
value	String	Definition Parameter value. Range The value can contain 1 to 64 characters.
check_result	String	Definition Check results. Range • success • fail

Status code: 400**Table 4-1186** Response body parameters

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

Status code: 500

Table 4-1187 Response body parameters

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

Example Request

POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/database-config-check

```
{
  "source_database_name": "source_database_name",
  "target_database_name": "target_database_name",
  "db_configs": [ {
    "param_name": "enable_chunk_level_dump",
    "value": "false"
  }, {
    "param_name": "snapshot_with_lock",
    "value": "true"
  }, {
    "param_name": "sync_commit_interval_ms",
    "value": "5000"
  }, {
    "param_name": "max_sync_commit_rows",
    "value": "500000"
  }, {
    "param_name": "max_sync_commit_bytes",
    "value": "268435456"
  }, {
    "param_name": "max_full_sync_task_threads_num",
    "value": "1"
  }, {
    "param_name": "max_rows_per_chunk",
    "value": "0"
  }, {
    "param_name": "max_bytes_per_chunk",
    "value": "268435456"
  }, {
    "param_name": "binlog_expire_logs_seconds",
    "value": "0"
  } ],
  "table_repl_config": {
    "repl_type": "include_tables",
    "repl_scope": "all",
    "tables": [ ]
  },
  "source_instance_id": "source_instance_id",
  "source_node_id": "source_node_id"
}
```

Example Response

Status code: 200

Success.

```
{
  "source_database_name": "source_database_name",
  "target_database_name": "",
  "source_db_config_check_results": [ {
    "param_name": "enable_chunk_level_dump",
    "value": "false",

```

```
"check_result" : "success"
}, {
  "param_name" : "snapshot_with_lock",
  "value" : "true",
  "check_result" : "success"
}],
"target_db_config_check_results" : [ ]
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.20 Querying Configurations of a StarRocks Data Synchronization Task

Function

This API is used to query configurations of a StarRocks data synchronization task. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
configuration

Table 4-1188 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1189 Query parameter

Parameter	Mandatory	Type	Description
task_name	Yes	String	Definition Name of the data synchronization task. Constraints Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range The value can contain 3 to 128 characters. Default Value N/A

Request Parameters

Table 4-1190 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1191 Response body parameters

Parameter	Type	Description
source_instance_id	String	Definition TaurusDB instance ID. Range N/A
source_node_id	String	Definition TaurusDB node ID. Range N/A
database_info	DataBaseInfo object	Definition TaurusDB database configuration information. Range N/A
table_infos	Array of TableConfigCheckResult objects	Table configurations.
table_repl_config	TableReplConfig object	Table synchronization configurations.
new_table_repl_config	TableReplConfig object	Updated table synchronization configurations.

Parameter	Type	Description
target_database_name	String	Definition Name of the destination database. Range The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed.
is_tables_change	Boolean	Definition Whether there is any change to the synchronization scope (tables to be synchronized). Range N/A
last_error_of_alter_table	String	Definition Exception about the latest ALTER TABLE operation. Range N/A

Table 4-1192 DataBaseInfo

Parameter	Type	Description
database_name	String	Database name.
db_config_check_results	Array of DbConfigCheckResult objects	Database configuration check result.

Table 4-1193 DbConfigCheckResult

Parameter	Type	Description
param_name	String	Parameter name. The name can contain 3 to 128 characters.
value	String	Parameter value. The value can contain 1 to 64 characters.

Parameter	Type	Description
check_result	String	Check results. Values: • success • fail

Table 4-1194 TableConfigCheckResult

Parameter	Type	Description
table_name	String	Definition Table name. Range N/A
table_config	String	Definition Table configuration item. Range N/A
check_result	String	Definition Check results. Range success/failed

Table 4-1195 TableReplConfig

Parameter	Type	Description
repl_type	String	Table synchronization type. • include_tables: whitelist • exclude_tables: blacklist
repl_scope	String	Table synchronization scope. • all: all tables • part: some tables
tables	Array of strings	Tables listed on the whitelist or blacklist.

Status code: 400

Table 4-1196 Response body parameters

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

Status code: 500**Table 4-1197** Response body parameters

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

Example Request

Querying configurations of the data synchronization task **taskName**

```
GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/configuration?task_name=taskName
```

Example Response

Status code: 200

Success.

```
{
  "source_instance_id" : "source_instance_id",
  "target_database_name" : "target_database_name",
  "source_node_id" : "source_node_id",
  "database_info" : {
    "database_name" : "database_name",
    "db_config_check_results" : [ {
      "param_name" : "default_isolation_level",
      "value" : "QUERY_SNAPSHOT",
      "check_result" : "success"
    }, {
      "param_name" : "enable_snapshots",
      "value" : "true",
      "check_result" : "failed"
    } ]
  },
  "table_infos" : [ ],
  "table_repl_config" : {
    "repl_type" : "exclude_tables",
    "repl_scope" : "all",
    "tables" : [ ]
  },
  "new_table_repl_config" : { },
  "is_tables_change" : false,
  "last_error_of_alter_table" : ""
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.21 Querying Database Parameter Settings for StarRocks Data Synchronization

Function

This API is used to query database parameter settings for StarRocks data synchronization. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
database-parameters

Table 4-1198 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1199 Query parameters

Parameter	Mandatory	Type	Description
add_task_scenario	No	String	Definition Whether database parameters can be modified when a subtask is added. Constraints Optional. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
offset	No	String	Definition Index offset. If offset is set to <i>N</i> , the query starts from the <i>N</i> +1 piece of data. If the value is set to 0 , indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range ≥ 0 Default Value 0
limit	No	String	Definition Number of records to be queried. Constraints N/A Range 1–100 Default Value 1
main_task_name	No	String	Definition Name of the main task corresponding to the new subtask. Constraints Optional. Range N/A Default Value N/A

Request Parameters

Table 4-1200 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1201** Response body parameter

Parameter	Type	Description
db_parameters	Array of DbParameter objects	Definition Database parameters. Range N/A

Table 4-1202 DbParameter

Parameter	Type	Description
param_name	String	Constraints Parameter name. Range N/A
data_type	String	Constraints Parameter type. Range N/A
default_value	String	Constraints Default parameter value. Range N/A
value_range	String	Constraints Parameter value range. Range N/A
description	String	Constraints Parameter description. Range N/A
is_modifiable	String	Definition Whether database parameters can be modified when a subtask is added. Range N/A

Status code: 400**Table 4-1203** Response body parameters

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

Status code: 500

Table 4-1204 Response body parameters

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

Example Request

Querying database parameter settings for data synchronization of a StarRocks instance with instance ID specified

GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/database-parameters

Example Response

Status code: 200

Success.

```
{
  "db_parameters": [ {
    "param_name": "enable_chunk_level_dump",
    "data_type": "String",
    "default_value": "false",
    "value_range": "true|false",
    "description": "Whether to enable shard replication.",
    "is_modifiable": "Yes"
  }, {
    "param_name": "snapshot_with_lock",
    "data_type": "String",
    "default_value": "true",
    "value_range": "true|false",
    "description": "Whether a lock is added when a full snapshot is obtained. The default value is true.",
    "is_modifiable": "Yes"
  }, {
    "param_name": "sync_commit_interval_ms",
    "data_type": "Integer",
    "default_value": "5000",
    "value_range": "1000-60000",
    "description": "Timeout interval for batch commit. Data is committed when the timeout interval is reached or the buffer is full.",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_sync_commit_rows",
    "data_type": "Integer",
    "default_value": "500000",
    "value_range": "500000-2000000",
    "description": "Maximum number of rows allowed for each commit.",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_sync_commit_bytes",
    "data_type": "Integer",
    "default_value": "268435456",
    "value_range": "10485760-1610612736",
    "description": "Maximum number of bytes allowed for each commit.",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_full_sync_task_threads_num",
    "data_type": "Integer",
    "default_value": "1",
    "value_range": "1-2",
  }
```

```
"description" : "Maximum threads allowed for full synchronization.",
"is_modifiable" : "Yes"
}, {
  "param_name" : "max_rows_per_chunk",
  "data_type" : "Integer",
  "default_value" : "0",
  "value_range" : "0-1000000",
  "description" : "Maximum number of rows per shard.",
  "is_modifiable" : "Yes"
}, {
  "param_name" : "max_bytes_per_chunk",
  "data_type" : "Integer",
  "default_value" : "268435456",
  "value_range" : "33554432-1073741824",
  "description" : "Maximum number of bytes per shard.",
  "is_modifiable" : "Yes"
}, {
  "param_name" : "binlog_expire_logs_seconds",
  "data_type" : "Integer",
  "default_value" : "86400",
  "value_range" : "0-604800",
  "description" : "Binlog retention period, which must be no greater than that of TaurusDB. The value 0 indicates that the retention period is not limited.",
  "is_modifiable" : "Yes"
} ]
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.22 Querying Databases of a StarRocks Instance

Function

This API is used to query databases of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases

Table 4-1205 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-1206 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints N/A Range 1–100 Default Value 1

Parameter	Mandatory	Type	Description
offset	No	String	Definition Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. If the value is set to 0 , indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range ≥ 0 Default Value 0
database_name	No	String	Definition Name of the database to be queried. Fuzzy search is supported. Constraints The value can contain 3 to 128 characters. Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. Range N/A Default Value N/A

Request Parameters

Table 4-1207 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1208** Response body parameters

Parameter	Type	Description
databases	Array of strings	Definition Database name. Range N/A

Parameter	Type	Description
total_count	Integer	Definition Number of databases. Range N/A
timestamp	Integer	Definition Query timestamp. Range N/A

Status code: 400

Table 4-1209 Response body parameters

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

Status code: 500

Table 4-1210 Response body parameters

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

Example Request

Querying the first 10 databases of a StarRocks instance with instance ID specified

```
GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/databases?
limit=10&offset=1&database_name=
```

Example Response

Status code: 200

Success.

```
{
  "databases": [ "INFORMATION_SCHEMA", "connections_db1_08759", "connections_db1_31465",
  "default", "information_schema", "system" ],
  "total_count": 6,
```

```
{
  "timestamp" : 1706257484
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.23 Querying Database Accounts of a StarRocks Instance

Function

This API is used to query database accounts of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/users

Table 4-1211 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-1212 Query parameters

Parameter	Mandatory	Type	Description
user_name	No	String	Definition Database account. Constraints N/A Range N/A Default Value N/A
limit	Yes	Integer	Definition Number of records to be queried. Constraints N/A Range 1–100 Default Value 1

Parameter	Mandatory	Type	Description
offset	Yes	Integer	Definition Index offset. If offset is set to N , the resource query starts from the $N+1$ piece of data. If the value is set to 0 , indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range ≥ 0 Default Value 0

Request Parameters

Table 4-1213 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1214 Response body parameters

Parameter	Type	Description
user_details	Array of user_details objects	Definition Database account information. Range N/A
total_count	Integer	Definition Number of database accounts. Range N/A

Table 4-1215 user_details

Parameter	Type	Description
user_name	String	Definition Username of the database account. Range N/A
data_bases	Array of strings	Definition Authorized databases. Range N/A

Parameter	Type	Description
dml	Integer	Definition DML permissions. Range • 0: read/write permission • 1: read-only permission • 2: read-only and configuration permissions • 3: read/write and configuration permissions
ddl	Integer	Definition Whether DDL permissions are granted. Range • 0: No • 1: Yes

Status code: 400

Table 4-1216 Response body parameters

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

Status code: 500

Table 4-1217 Response body parameters

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

Example Request

Querying 10 database accounts

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
54e42160670e48e789af7075e1efea1fin16/starrocks/users?limit=10
```

Example Response

Status code: 200

Success.

```
{
  "user_details" : [ {
    "user_name" : "root",
    "data_bases" : [ "*" ],
    "dml" : 2,
    "ddl" : 0
  }, {
    "user_name" : "user_test",
    "data_bases" : [ "*" ],
    "dml" : 2,
    "ddl" : 0
  } ],
  "total_count" : 2
}
```

Status Code

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

Error Code

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

4.15.24 Creating a Database Account for a StarRocks Instance

Function

This API is used to create a database account for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/users

Table 4-1218 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1219 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1220 Request body parameters

Parameter	Mandatory	Type	Description
user_name	Yes	String	Definition Username of the database account. The username can be 2 to 32 characters long. It must start with a lowercase letter and end with a lowercase letter or digit. Only lowercase letters, digits, and underscores (_) are allowed. Constraints This parameter is mandatory. Range N/A Default Value N/A
password	Yes	String	Definition Account password. The password must: • Consist of 8 to 32 characters. • Be different from the username or the username spelled backwards. • Contain at least three types of the following characters: uppercase letters, lowercase letters, digits, and special characters ~!@#%^*_-=+?, Constraints This parameter is mandatory. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
databases	Yes	Array of strings	Definition Database list. Constraints This parameter is mandatory. Range N/A Default Value N/A
dml	No	Integer	Definition DML permissions. Constraints N/A Range • 0: read/write permission • 1: read-only permission • 2: read-only and configuration permissions • 3: read/write and configuration permissions Default Value 2
ddl	No	Integer	Definition Whether DDL permissions are granted. Constraints N/A Range • 0: No • 1: Yes Default Value 0

Response Parameters

Status code: 200

Table 4-1221 Response body parameter

Parameter	Type	Description
result	String	Request results.

Status code: 400**Table 4-1222** Response body parameters

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

Status code: 500**Table 4-1223** Response body parameters

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

Example Request

Creating a database account

```
POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/54e42160670e48e789af7075e1efea1fin16/starrocks/users
{
  "user_name" : "user_test",
  "dml" : 2,
  "ddl" : 0,
  "password" : "Rds_1234",
  "databases" : [ "INFORMATION_SCHEMA", "default" ]
}
```

Example Response

Status code: 200

Success.

```
{
  "result" : "SUCCESS"
}
```

Status Code

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

Error Code

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

4.15.25 Deleting a Database Account of a StarRocks Instance

Function

This API is used to delete a database account of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/users

Table 4-1224 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 4-1225 Query parameter

Parameter	Mandatory	Type	Description
user_name	Yes	String	Definition Username of the database account. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 4-1226 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1227** Response body parameter

Parameter	Type	Description
result	String	Definition Request results. Range N/A

Status code: 400

Table 4-1228 Response body parameters

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

Status code: 500**Table 4-1229** Response body parameters

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

Example Request

Deleting a database account

```
DELETE https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
54e42160670e48e789af7075e1efea1fin16/starrocks/user?user_name=user_test
```

Example Response

Status code: 200

Success.

```
{  
  "result" : "SUCCESS"  
}
```

Status Code

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

Error Code

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

4.15.26 Changing the Password of a Database Account for a StarRocks Instance

Function

This API is used to change the password of a database account for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/users/password

Table 4-1230 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1231 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1232 Request body parameters

Parameter	Mandatory	Type	Description
user_name	Yes	String	Definition Username of the database account. Constraints This parameter is mandatory. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
password	Yes	String	Definition Account password. The password must: • Consist of 8 to 32 characters. • Be different from the username or the username spelled backwards. • Contain at least three types of the following characters: uppercase letters, lowercase letters, digits, and special characters ~!@#%^*-_+=?, Constraints This parameter is mandatory. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1233 Response body parameter

Parameter	Type	Description
result	String	Definition Request results. Range N/A

Status code: 400

Table 4-1234 Response body parameters

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

Status code: 500

Table 4-1235 Response body parameters

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

Example Request

Changing the password of a database account

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/54e42160670e48e789af7075e1efea1fin16/starrocks/users/password
{
  "user_name" : "user_test",
  "password" : "Tang_1234"
}
```

Example Response

Status code: 200

Success.

```
{
  "result" : "SUCCESS"
}
```

Status Code

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

Error Code

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

4.15.27 Changing Permissions of a Database Account for a StarRocks Instance

Function

This API is used to change permissions of a database account for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/users/permission

Table 4-1236 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1237 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1238 Request body parameters

Parameter	Mandatory	Type	Description
user_name	Yes	String	Definition Username of the database account. Constraints This parameter is mandatory. Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
databases	No	Array of strings	Definition Database list. Constraints N/A Range N/A Default Value N/A
dml	No	Integer	Definition DML permissions. Constraints N/A Range • 0: read/write permission • 1: read-only permission • 2: read-only and configuration permissions • 3: read/write and configuration permissions Default Value N/A
ddl	No	Integer	Definition Whether DDL permissions are granted. Constraints N/A Range • 0: No • 1: Yes Default Value N/A

Response Parameters

Status code: 200

Table 4-1239 Response body parameter

Parameter	Type	Description
result	String	Definition Request results. Range N/A

Status code: 400**Table 4-1240** Response body parameters

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

Status code: 500**Table 4-1241** Response body parameters

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

Example Request

Changing permissions of a database account

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/86fd60a5256a4592b957e8e6bb2d1b59in07/starrocks/users/permission
{
  "user_name" : "user_test",
  "dml" : 2,
  "databases" : [ "*" ]
}
```

Example Response

Status code: 200

Success.

```
{
  "result" : "SUCCESS"
}
```

Status Code

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

Error Code

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

4.15.28 Changing the Specifications of a StarRocks Instance

Function

This API is used to change the specifications of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/resize-flavor

Table 4-1242 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition TaurusDB instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1243 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1244 Request body parameters

Parameter	Mandatory	Type	Description
fe_flavor_id	No	String	Definition vCPU and memory specification ID of frontend nodes. If this parameter is left blank, the specification ID is the same as the original specification ID. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
be_flavor_id	No	String	Definition vCPU and memory specification ID of backend nodes. If this parameter is left blank, the specification ID is the same as the original specification ID. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1245 Response body parameter

Parameter	Type	Description
job_id	String	Definition Workflow ID. Range N/A

Status code: 400

Table 4-1246 Response body parameters

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

Status code: 500

Table 4-1247 Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/40dc4c5729f14aad893e2dcd5baf6a15in07/starrocks/resize-flavor
{
  "fe_flavor_id" : "c44cfde6-d250-313c-8d7a-cd216f071658",
  "be_flavor_id" : "c44cfde6-d250-313c-8d7a-cd216f071670"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "32df2c1d-91c9-4777-8b4a-608030aed64d"
}
```

Status Code

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

Error Code

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

4.15.29 Querying Parameters

Function

This API is used to query parameters by node type. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/configurations

Table 4-1248 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1249 Query parameters

Parameter	Mandatory	Type	Description
node_type	Yes	String	Definition Node type. Constraints N/A Range • be • fe Default Value N/A

Parameter	Mandatory	Type	Description
offset	No	Integer	Definition Index offset. Constraints The value must be a number. Range The value cannot be a negative number. Default Value 0 : The query starts from the first data record.
limit	No	Integer	Definition Number of records to be queried. Constraints The value cannot be a negative number. Range [1, 100] Default Value 100

Request Parameters

Table 4-1250 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 4-1251 Response body parameters

Parameter	Type	Description
configurations	ParameterConfigurationInfo object	Definition Parameter information. Range N/A
total_count	Long	Definition Total number of parameters. Range N/A
parameter_values	Array of ParameterValuesInfo objects	Definition Parameter objects. Range N/A

Table 4-1252 ParameterConfigurationInfo

Parameter	Type	Description
datastore_version_name	String	Definition DB version name. Range 2.0

Parameter	Type	Description
datastore_name	String	Definition DB engine name in the parameter template. Range taurus
created	String	Definition Time when the parameter template was created. The format is "yyyy-mm-ddThh:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A
updated	String	Definition Time when the parameter template was updated. The format is "yyyy-mm-ddThh:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Range N/A

Table 4-1253 ParameterValuesInfo

Parameter	Type	Description
name	String	Definition Parameter name. Range N/A
value	String	Definition Parameter value. Range N/A

Parameter	Type	Description
restart_required	Boolean	Definition Whether a reboot is required. Range • false: No • true: Yes
readonly	Boolean	Definition Whether the parameter is read-only. Range • false: No • true: Yes
value_range	String	Definition Value range. Range N/A
type	String	Definition Parameter type. Range • string • integer • boolean • list • float
description	String	Definition Parameter description. Range N/A

Status code: 400**Table 4-1254** Response body parameters

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

Status code: 500

Table 4-1255 Response body parameters

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

Example Request

Querying the parameters of backend nodes

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/3edf6218dfb442329730765ee02fdd31in17/starrocks/configurations?node_type=be
```

Example Response

Status code: 200

Result returned by the API.

```
{
  "configurations": {
    "datastore_name": "taurus",
    "datastore_version_name": "2.0",
    "created": "2024-05-17T02:58:32+0000",
    "updated": "2024-05-17T08:51:45+0000"
  },
  "parameter_values": [
    {
      "name": "auto_increment_increment",
      "value": "1",
      "restart_required": false,
      "readonly": false,
      "value_range": "1-65535",
      "type": "integer",
      "description": "auto_increment_increment and auto_increment_offset are used for master-to-master replication and to control the operations of the AUTO_INCREMENT column."
    },
    ...
  ],
  "total_count": 140
}
```

Status Code

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

Error Code

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

4.15.30 Modifying Parameters

Function

This API is used to modify parameters by node type. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/configurations

Table 4-1256 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1257 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1258 Request body parameters

Parameter	Mandatory	Type	Description
node_type	Yes	String	Definition Node type. Constraints N/A Range • be • fe Default Value N/A
parameter_values	Yes	Map<String,String>	Definition Mapping between parameter names and parameter values. You can specify parameter values based on a default parameter template. If this parameter is not specified, the original parameter information is retained. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1259 Response body parameters

Parameter	Type	Description
job_id	String	Definition ID of the task for modifying parameters of a specified instance. Range N/A

Parameter	Type	Description
restart_required	Boolean	Definition Whether a reboot is required. Range true : Yes false : No

Status code: 400**Table 4-1260** Response body parameters

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

Status code: 500**Table 4-1261** Response body parameters

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

Example Request

```
PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
3ef58db3986540d19f95151309368d34in17/starrocks/configurations  
  
{  
  "parameter_values": {  
    "sync_tablet_meta": "true"  
  },  
  "node_type": "be"  
}
```

Example Response**Status code: 200**

Result returned by the API.

```
{  
  "job_id": "aacd2f81-3fcb-427b-a52e-142639c6d1b9",  
  "restart_required": false  
}
```

Status Code

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

Error Code

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

4.15.31 Enabling Assign Requests to Row and Column Store Nodes for a StarRocks Instance

Function

This API is used to enable Assign Requests to Row and Column Store Nodes for a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/users/sync

Table 4-1262 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1263 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1264 Request body parameter

Parameter	Mandatory	Type	Description
action	Yes	String	Definition StarRocks account synchronization. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1265 Response body parameter

Parameter	Type	Description
success	String	Definition Whether Assign Requests to Row and Column Store Nodes is enabled. Range N/A

Status code: 400**Table 4-1266** Response body parameters

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

Status code: 500**Table 4-1267** Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/58fab56787854702b20f0e17cdcb49b9in17/starrocks/users/sync
{
  "action" : "startSyncTaurusAccount"
}
```

Example Response

Status code: 200

Success.

```
{
  "success" : true
}
```


Status Code

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

Error Code

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

4.15.32 Comparing Parameters

Function

This API is used to compare instance parameters with those in the default template. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/configurations/starrocks/comparison

Table 4-1268 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1269 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1270 Request body parameter

Parameter	Mandatory	Type	Description
source_configuration_id	Yes	String	Definition ID of the source parameter template for comparison. To obtain this value, see Querying a StarRocks Instance . Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1271 Response body parameter

Parameter	Type	Description
differences	Array of ParamGroupParameterDifferences objects	Definition Differences between parameters in the source and target parameter templates. Range N/A

Table 4-1272 ParamGroupParameterDifferences

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 target parameter template.

Status code: 400

Table 4-1273 Response body parameters

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

Status code: 500**Table 4-1274** Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/comparison
{
  "source_configuration_id" : "a2069d40256f40078c52d90d6a91ee63pr17",
}
```

Example Response

Status code: 200

Differences between parameters.

```
{
  "differences" : [ {
    "parameter_name" : "alter_tablet_worker_count",
    "source_value" : "4",
    "target_value" : "3"
  } ]
}
```

Status Code

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

Error Code

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

4.15.33 Upgrading the Kernel Version of a StarRocks Instance

Function

This API is used to upgrade the kernel version of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/db-upgrade

Table 4-1275 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition StarRocks instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1276 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . Constraints N/A Range N/A Default Value N/A
X-Language	Yes	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json

Table 4-1277 Request body parameters

Parameter	Mandatory	Type	Description
delay	No	String	Definition Whether to delay the upgrade. Constraints N/A Range • true • false Default Value false
is_skip_validate	No	String	Definition Whether to skip upgrade verification. Constraints N/A Range • true • false Default Value false

Response Parameters

Status code: 200

Table 4-1278 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for upgrading the kernel version. Range N/A

Status code: 400

Table 4-1279 Response body parameters

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

Status code: 500**Table 4-1280** Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/db-upgrade
{
  "delay" : false,
  "is_skip_validate" : false
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "job_id"
}
```

Status code: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.34 Querying Databases of a Primary HTAP Instance

Function

This API is used to query databases of a primary HTAP instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/htap/databases

Table 4-1281 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Standard HTAP instance ID, which is compliant with the UUID format. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Table 4-1282 Query parameters

Parameter	Mandatory	Type	Description
limit	No	String	Definition Number of records to be queried. Constraints N/A Range N/A Default Value 100
offset	No	String	Definition Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. If the value is set to 0 , indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range N/A Default Value 0

Request Parameters

Table 4-1283 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
Content-Type	Yes	String	Definition Content type. Constraints N/A Range application/json Default Value application/json
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1284 Request body parameters

Parameter	Mandatory	Type	Description
databases	No	Array of strings	Definition Names of databases to be queried. Constraints Only uppercase letters, lowercase letters, digits, and underscores (_) are allowed. For a fuzzy search, input just one database name. Range N/A Default Value N/A
source_instance_id	No	String	Definition ID of the source instance whose database is to be queried. The value is compliant with the UUID format. Constraints The value contains 36 characters. Only letters and digits are allowed. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1285 Response body parameters

Parameter	Type	Description
databases	Array of strings	Definition Database names. Range N/A

Parameter	Type	Description
total_count	Integer	Definition Number of databases. Range N/A
timestamp	Integer	Definition Query timestamp. Range N/A

Status code: 400**Table 4-1286** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Status code: 500**Table 4-1287** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

Querying the first 10 databases of the instance whose ID is **1f6305e9ac4443b8a79f1bfd3a523002in07**

```
GET https://{endpoint}/v3/{project_id}/instances/{instance_id}/htap/databases?limit=10&offset=1
{
  "databases": [ ],
  "source_instance_id": "1f6305e9ac4443b8a79f1bfd3a523002in07"
}
```

Example Response

Status code: 200

Success.

```
{
  "databases": [ "INFORMATION_SCHEMA", "connections_db1_08759", "connections_db1_31465",
  "default", "information_schema", "system" ],
  "total_count": 6
}
```

Status code: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.35 Querying Error Logs

Function

This API is used to query error logs of the kernel. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/error-logs

Table 4-1288 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Standard HTAP instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1289 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1290 Request body parameters

Parameter	Mandatory	Type	Description
node_id	Yes	String	Definition ID of a standard HTAP instance node. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
start_time	Yes	String	Definition Start time of the log. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Constraints N/A Range N/A Range N/A
end_time	Yes	String	Definition End time of the log. The format is yyyy-mm-ddThh:mm:ssZ. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, if the time zone offset is one hour, the value of Z is +0100 . Constraints N/A Range N/A Default Value N/A
level	Yes	String	Definition Log level. Constraints N/A Range N/A Range N/A

Parameter	Mandatory	Type	Description
limit	Yes	Integer	Definition Number of records to be queried. Constraints N/A Range 0–100 Default Value N/A
line_num	No	String	Definition Sequence number of a log event. This parameter is not required for the first query, but is required for subsequent pagination queries. The value can be obtained from the response of the last query. Constraints N/A Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1291 Response body parameter

Parameter	Type	Description
error_log_list	Array of error_log_list objects	Definition Error logs. Constraints N/A

Table 4-1292 error_log_list

Parameter	Type	Description
node_id	String	Definition ID of a standard HTAP instance node. Range N/A
time	String	Definition Log time. Range N/A
level	String	Definition Log level. Range N/A
content	String	Definition Log content. Range N/A
line_num	String	Definition Sequence number of a log event. This parameter is not required for the first query, but is required for subsequent pagination queries. The value can be obtained from the response of the last query. Range N/A

Status code: 400

Table 4-1293 Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A

Parameter	Type	Description
error_msg	String	Definition Error message. Range N/A

Status code: 500

Table 4-1294 Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

Querying error logs of the kernel

```
POST https://{endpoint}/rds/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
614ff06f72ee46b7949423572dd51e8bin17/starrocks/error-logs
```

```
{  
  "node_id" : "aeb9e81135b34197bab8636fc8a1c569no17",  
  "start_time" : "2025-05-12T00:14:27+0100",  
  "end_time" : "2025-05-12T02:14:27+0100",  
  "limit" : "10",  
  "line_num" : "1669344916000",  
  "level" : "All"  
}
```

Example Response

Status code: 200

Success

```
{  
  "error_log_list" : [ {  
    "node_id" : "941d21130b3c4899ad1a752a0945befdno07",  
    "time" : "2025-04-24T03:25:19",  
    "level" : "WARNING",  
    "content" : "[MY-012091] [InnoDB] Allocated tablespace ID 6 for mysql/node_host_status, old maximum  
was 4",
```

```
"line_num" : "1669344916000"
} ]
}
```

Status code: 400

Error response

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.36 Changing the Security Group of a StarRocks Instance

Function

This API is used to change the security group of a StarRocks instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/security-group

Table 4-1295 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Parameter	Mandatory	Type	Description
instance_id	Yes	String	Definition Standard HTAP instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1296 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1297 Request body parameter

Parameter	Mandatory	Type	Description
security_group_id	Yes	String	Definition Security group ID. Constraints If a network ACL is enabled for the subnet where the instance is located, this parameter is optional. If a network ACL is not enabled, this parameter is mandatory. To obtain this value, use either of the following methods: - Method 1: Log in to VPC console. Choose Access Control > Security Groups in the navigation pane. On the displayed page, click the target security group. You can view the security group ID on the displayed page. - Method 2: Call the API for querying security groups. For details, see Querying Security Groups. Range N/A Default Value N/A

Response Parameters

Status code: 200

Table 4-1298 Response body parameter

Parameter	Type	Description
workflow_id	String	Definition Workflow ID. Range N/A

Status code: 400

Table 4-1299 Response body parameters

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

Status code: 500

Table 4-1300 Response body parameters

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

Example Request

```
POST https://{endpoint}/v3/{project_id}/instances/{instance_id}/starrocks/security-group
{
  "security_group_id" : "967a0ac2-3cae-4e57-a49a-d0f6ff07dcc1"
}
```

Example Response

Status code: 200

Success.

```
{
  "job_id" : "467258e0-4e6e-4167-b072-7f4e23231bf3"
}
```


Status Code

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

Error Code

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

4.15.37 Querying LTS Configurations of an Instance

Function

This API is used to query LTS configurations of an instance. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/starrocks/instances/logs/lts-configs

Table 4-1301 URI parameter

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A

Table 4-1302 Query parameters

Parameter	Mandatory	Type	Description
instance_id	No	String	Definition Standard HTAP instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A
enterprise_project_id	No	String	Definition Enterprise project ID. Constraints N/A Range N/A Default Value N/A
instance_name	No	String	Definition Name of a standard HTAP instance. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
limit	No	Integer	Definition Number of records to be queried. Constraints N/A Range 0–100 Default Value 10
offset	No	Integer	Definition Index offset. If offset is set to N, the resource query starts from the $N+1$ piece of data. If the value is set to 0, indicating that the query starts from the first piece of data. The value must be a number but cannot be a negative number. Constraints N/A Range 0–10000 Default Value 0

Request Parameters

Table 4-1303 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1304** Response body parameters

Parameter	Type	Description
instance_lts_configs	Array of instance_lts_configs objects	Definition LTS configurations of an instance. Constraints N/A

Parameter	Type	Description
total_count	Integer	Definition Number of instances. Range N/A

Table 4-1305 instance_lts_configs

Parameter	Type	Description
lts_configs	Array of lts_configs objects	Definition LTS configurations. Constraints N/A
instance	instance object	Definition Information about a standard HTAP instance. Constraints N/A

Table 4-1306 lts_configs

Parameter	Type	Description
log_type	String	Definition Log type. Range N/A
lts_group_id	String	Definition LTS log group ID. Range N/A
lts_stream_id	String	Definition LTS log stream ID. Range N/A

Parameter	Type	Description
enabled	String	Definition Whether LTS configurations are enabled. Range N/A

Table 4-1307 instance

Parameter	Type	Description
id	String	Definition Standard HTAP instance ID, which uniquely identifies an instance. Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed.
name	String	Definition Name of a standard HTAP instance. Range N/A
engine_name	String	Definition Engine type. Range N/A
engine_version	String	Definition Engine version. Range N/A
status	String	Definition Status of a standard HTAP instance. Range N/A
enterprise_project_id	String	Definition Enterprise project ID. Range N/A

Parameter	Type	Description
enterprise_project_name	String	Definition Enterprise project name. Range N/A

Status code: 400**Table 4-1308** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Status code: 500**Table 4-1309** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

Querying LTS configurations of an instance

```
GET https://{endpoint}/rds/v3/619d3e78f61b4be68bc5aa0b59edcf7b/logs/starrocks/lts-configs?instance_id=faf2cbf7f6cb422d83e61dbcc3e87023in17
```

Example Response

Status code: 200

Success

```
{
  "instance_lts_configs": [ {
    "lts_configs": [ {
      "log_type": "error_log",
      "lts_group_id": "460d8437-9dcb-47d0-8c56-5758f2042272",
      "lts_stream_id": "bad1ca5d-e347-437f-be89-f2e08ce117b8",
      "enabled": false
    } ],
    "instance": {
      "id": "4c2614fe03ae4ec28184a277b8c00c03in17",
      "name": "gauss-HTAP",
      "mode": "Cluster",
      "engine_name": "starrocks",
      "engine_version": "2.0.48",
      "status": "normal",
      "enterprise_project_id": "0",
      "enterprise_project_name": "string"
    }
  } ],
  "total_count": 1
}
```

Status code: 400

Error response

```
{
  "error_code": "DBS.200022",
  "error_msg": "Instance not found."
}
```

Status Code

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

Error Code

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

4.15.38 Querying Node Information

Function

This API is used to query node information. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

```
GET /v3/{project_id}/instances/{instance_id}/starrocks/nodes
```


Table 4-1310 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Standard HTAP instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in17 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1311 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1312** Response body parameter

Parameter	Type	Description
node_list	Array of node_list objects	Definition Nodes of a standard HTAP instance. Constraints N/A

Table 4-1313 node_list

Parameter	Type	Description
node_id	String	Definition ID of a standard HTAP instance node. Range N/A
node_name	String	Definition Name of a standard HTAP instance node. Range N/A
role	String	Definition Role of a standard HTAP instance node. Range • fe-leader • fe-follower • fe-observer • be

Status code: 400**Table 4-1314** Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Status code: 500

Table 4-1315 Response body parameters

Parameter	Type	Description
error_code	String	Definition Error code. Range N/A
error_msg	String	Definition Error message. Range N/A

Example Request

Querying node information

```
GET https://{endpoint}/rds/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/28f61af50fc9452aa0ed5ea25c3cin17/starrocks/nodes
```

Example Response

Status code: 200

Success

```
{
  "node_list" : [ {
    "node_id" : "f1a5641d62f44803ac38ffefed0e4736no07",
    "node_name" : "htap-node01",
    "role" : "fe-leader"
  } ]
}
```

Status code: 400

Error response

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "Instance not found."
}
```

Status Code

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

Error Code

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

4.16 Multi-tenancy

4.16.1 Querying the Status of Multi-tenancy

Function

This API is used to query the status of multi-tenancy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/multi-tenant

Table 4-1316 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1317 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range • en-us • zh-cn Default Value en-us

Response Parameters

Status code: 200**Table 4-1318** Response body parameter

Parameter	Type	Description
multi_tenant_switch	Boolean	Definition Whether to enable multi-tenancy for an instance. Range • true: enabled • false: disabled

Status code: 400**Table 4-1319** Response body parameters

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

Status code: 500**Table 4-1320** Response body parameters

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

Example Request

Querying the status of multi-tenancy

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant
```

Example Response

Status code: 200

Success.

```
{
  "multi_tenant_switch" : true
}
```

Status Code

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

Error Code

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

4.16.2 Enabling or Disabling Multi-tenancy

Function

This API is used to enable or disable multi-tenancy. Before calling this API:

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

PUT /v3/{project_id}/instances/{instance_id}/multi-tenant

Table 4-1321 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Request Parameters

Table 4-1322 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Table 4-1323 Request body parameter

Parameter	Mandatory	Type	Description
multi_tenant_switch	Yes	Boolean	Definition Whether to enable multi-tenancy for an instance. Constraints N/A Range • true: Multi-tenancy is enabled. • false: Multi-tenancy is disabled. Default Value N/A

Response Parameters

Status code: 200

Table 4-1324 Response body parameter

Parameter	Type	Description
job_id	String	Definition ID of the task for enabling or disabling multi-tenancy. Range N/A

Status code: 400

Table 4-1325 Response body parameters

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

Status code: 500

Table 4-1326 Response body parameters

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

Example Request

- Enabling multi-tenancy
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant

```
{  
  "multi_tenant_switch" : true  
}
```
- Disabling multi-tenancy
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant

```
{  
  "multi_tenant_switch" : false  
}
```

Example Response

Status code: 200

Success.

```
{  
  "job_id" : "aef6a470-fb63-4d5b-b644-12ead7e019b3"  
}
```

Status Code

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

Error Code

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

5 Historical APIs

5.1 DB Engine Version Queries

5.1.1 Querying Version Information About a DB Engine

Function

This API is used to query the version information of a specified DB engine. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Version Information About a DB Engine](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/datastores/{database_name}
- Example
GET https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/datastores/gaussdb-mysql
- Parameter description

Table 5-1 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
database_name	Yes	DB engine. The following DB engine is supported (case-insensitive): gaussdb-mysql

Request

None

Response

- Normal response

Table 5-2 Parameter description

Name	Type	Description
datastores	Array of objects	DB versions. For details, see Table 5-3 .

Table 5-3 datastores field data structure description

Name	Type	Description
id	String	DB version ID. Its value is unique.
name	String	DB version number. Only the major version number with two digits is returned.

- Example normal response

```
{
  "datastores": [{
    "id": "87620726-6802-46c0-9028-a8785e1f1921",
    "name": "8.0"
  }]
}
```

Status Code

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

Error Code

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

5.2 Database Specification Queries

5.2.1 Querying Database Specifications

Function

This API is used to query the database specifications of a specified DB engine version. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Database Specifications](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/flavors/{database_name}?version_name={version_name}&spec_code={spec_code}&availability_zone_mode={availability_zone_mode}
- Example
GET https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/flavors/gaussdb-mysql?version_name=8.0&spec_code=gaussdb.mysql.xlarge.x86.4&availability_zone_mode=single
- Parameter description

Table 5-4 Parameter description

Name	Mandatory	Type	Description
project_id	Yes	String	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
database_name	Yes	String	DB engine. Its value is case-insensitive and can be: gaussdb-mysql

Name	Mandatory	Type	Description
version_name	No	String	DB version number. To obtain this value, see Querying Version Information About a DB Engine . Currently, only MySQL 8.0 is supported.
availability_zone_mode	Yes	String	AZ mode. Its value can be single or multi and is case-insensitive.
spec_code	No	String	Specification code.

Request

None

Response

- Normal response

Table 5-5 Parameter description

Name	Type	Description
flavors	Array of objects	DB instance specification list. For details, see Table 5-6 .

Table 5-6 flavors field data structure description

Name	Type	Description
vcpus	String	Number of vCPUs. For example, the value 1 indicates 1 vCPU.
ram	String	Memory size in GB.
type	String	Specification type. The value can be arm .
id	String	Specification ID. The value must be unique.
spec_code	String	Resource specification code. Its value is same as the value of flavor_ref .
version_name	String	DB version number.
instance_mode	String	DB instance type. Currently, only the cluster type is supported.

Name	Type	Description
az_status	Map<String, String>	Status of the AZ where the specification belongs. Its value can be any of the following: ● normal: on sale. ● unsupported: not supported ● sellout: sold out

- Example normal response

```
{
  "flavors": [
    {
      "vcpus": "1",
      "ram": "4",
      "type": "x86",
      "id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
      "spec_code": "gaussdb.xlarge.x86.4",
      "instance_mode": "Cluster",
      "version_name": "8.0",
      "az_status": {
        "az1": "normal",
        "az2": "normal"
      }
    },
    {
      "vcpus": "2",
      "ram": "4",
      "type": "arm",
      "id": "cefb8fab-c9f7-482f-a97c-e8a0c8abe35b",
      "spec_code": "gaussdb.mysql.xlarge.x86.2",
      "instance_mode": "Cluster",
      "version_name": "8.0",
      "az_status": {
        "az1": "normal",
        "az2": "normal"
      }
    }
  ]
}
```

Status Code

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

Error Code

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

5.3 Instance Management

5.3.1 Creating a DB Instance

Function

This API is used to create a DB instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Creating a DB Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/
instances
- Parameter description

Table 5-7 Parameter description

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

Request

Table 5-8 Parameter description

Name	Mandatory	Type	Description
charge_info	No	Object	Billing mode, which is yearly/monthly or pay-per-use (default setting). For details, see Table 5-9 . Note: You cannot create yearly/monthly instances in a DeC.

Name	Mandatory	Type	Description
name	Yes	String	DB instance name. Instances of the same type can have same names under the same tenant. The value consists of 4 to 64 characters and starts with a letter. It is case-sensitive and contains only letters, digits, hyphens (-), and underscores (_).
datastore	Yes	Object	Database information. For details, see Table 5-10 .
mode	Yes	String	DB instance type, which is case-insensitive. Currently, only the cluster type is supported.
flavor_ref	Yes	String	Specification code. For details, see Table 5-6 .
vpc_id	Yes	String	VPC ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and view the VPC ID on the VPC details page. • Method 2: See "Querying VPCs" in the <i>Virtual Private Cloud API Reference</i>.
subnet_id	Yes	String	Subnet ID. To obtain this value, use either of the following methods: • Method 1: Log in to the VPC console and click the target subnet on the Subnets page. You can view the subnet ID on the displayed page. • Method 2: See "Querying Subnets" in the <i>Virtual Private Cloud API Reference</i>.

Name	Mandatory	Type	Description
security_group_id	No	String	Security group ID. If network ACL is enabled, this parameter cannot be specified. If network ACL is disabled, this parameter is mandatory. - Method 1: Log in to VPC console. Choose Access Control > Security Groups in the navigation pane. On the displayed page, click the target security group. You can view the security group ID on the displayed page. - Method 2: See "Querying Security Groups" in the <i>Virtual Private Cloud API Reference</i>.
configuration_id	No	String	Parameter template ID.
password	Yes	String	Database password. Values: The password consists of 8 to 32 characters and contains at least three types of the following: uppercase letters, lowercase letters, digits, and special characters ~!@#%^*_-=+? You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. If you enter a weak password, the system automatically determines that the password is invalid.
backup_strategy	No	Object	Automated backup policy. For details, see Table 5-11 .
time_zone	No	String	UTC time zone. - If this parameter is not specified, UTC is used by default. - If this parameter is specified, the value ranges from UTC-12:00 to UTC+12:00 at the full hour. For example, the parameter can be UTC+08:00 rather than UTC+08:30.
availability_zone_mode	Yes	String	AZ type. It can be single or multi .

Name	Mandatory	Type	Description
master_availability_zone	If availability_zone_mode is set to multi , this parameter is mandatory. If availability_zone_mode is set to single , this parameter cannot be specified.	String	Primary AZ.
slave_count	Yes	Integer	Number of read replicas. The value is from 1 to 9. An instance contains up to 15 read replicas.
region	Yes	String	Region ID. The value cannot be empty. To obtain this value, see Regions and Endpoints .
volume	No	Object	Volume information. This parameter is optional during the creation of yearly/monthly instances. For details, see Table 5-12 .
enterprise_project_id	No	String	Enterprise project ID. This parameter is mandatory when the enterprise project is enabled.

Name	Mandatory	Type	Description
lower_case_table_names	No	Integer	Whether a kernel table name is case-sensitive. If the value is 1 (by default), the table name is case-insensitive. If the value is 0 , the table name is case-sensitive.
tags	No	Array of objects	Tag list. Each instance can be associated with tag key-value pairs while being created. • <i>{key}</i> indicates the tag key. It must be unique and cannot be empty. • <i>{value}</i> indicates the tag value, which can be empty. To create instances with multiple tag keys and values, separate key-value pairs with commas (.). Up to 20 key-value pairs can be added. For details, see Table 5-13.

Table 5-9 charge_info field data structure description

Name	Mandatory	Type	Description
charge_mode	Yes	String	Billing mode. Values: • prePaid: yearly/monthly • postPaid: pay-per-use
period_type	No	String	Subscription period. Values: • month: The service is subscribed by month. • year: The service is subscribed by year. NOTE This parameter is only available and mandatory when charge_mode is set to prePaid.

Name	Mandatory	Type	Description
period_num	No	Integer	Subscription duration. This parameter is only available and mandatory when charge_mode is set to prePaid . Values: - When period_type is set to month, the parameter value ranges from 1 to 9. - When period_type is set to year, the parameter value ranges from 1 to 3.

Table 5-10 datastore field data structure description

Name	Mandatory	Type	Description
type	Yes	String	DB engine. Currently, only gaussdb-mysql is supported.
version	Yes	String	DB version. For details about supported DB versions, see Querying Version Information About a DB Engine .

Table 5-11 backup_strategy field data structure description

Name	Mandatory	Type	Description
start_time	Yes	String	Automated backup start time. An automated backup will be triggered within one hour after the time specified by this parameter. The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is the UTC time. • 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. Example value: • 21:00-22:00

Table 5-12 volume field data structure description

Name	Mandatory	Type	Description
size	Yes	Integer	Disk size, in GB. The default value is 40. Value range: 40–128000. The value must be a multiple of 10.

Table 5-13 tags field data structure description

Name	Mandatory	Type	Description
key	Yes	String	Tag key. It contains a maximum of 36 Unicode characters. The value cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed.
value	Yes	String	Tag value. It contains a maximum of 43 Unicode characters. It can be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed.

 NOTE

The value of **region** in the following is used as an example.

- Request example

```
{
  "charge_info":{
    "charge_mode":"postPaid"
  },
  "region":"xxx",
  "name":"gaussdb-2d34",
  "datastore":{
    "type":"gaussdb-mysql",
    "version":"8.0"
  },
  "mode":"Cluster",
  "flavor_ref":"gaussdb.mysql.large.x86.4",
  "vpc_id":"f7ee62e2-9705-4523-ba49-a85ea1a1fa87",
  "subnet_id":"140af7bf-a9da-4dcf-8837-34199fd6d186",
  "security_group_id":"c7f69884-fe2b-4630-8114-70a11499d902",
  "configuration_id":"43570e0de32e40c5a15f831aa5ce4176pr07",
  "password":"xxxx",
  "backup_strategy":{
    "start_time":"17:00-18:00"
  },
  "time_zone":"UTC+08:00",
  "availability_zone_mode":"multi",
  "master_availability_zone":"az1pod1",
  "slave_count":1,
  "enterprise_project_id":"0",
  "lower_case_table_names":1
}
```


Response

- Normal response

Table 5-14 Parameter description

Name	Type	Description
instance	Object	Instance information. For details, see Table 5-15 .
job_id	String	ID of the task for creating an instance. This parameter is only returned for pay-per-use instances.
order_id	String	Order ID. This parameter is only returned for yearly/monthly instances.

Table 5-15 instance field data structure description

Name	Type	Description
id	String	DB instance ID.
name	String	DB instance name. Instances of the same type can have same names under the same tenant. The value consists of 4 to 64 characters and starts with a letter. It is case-insensitive and contains only letters, digits, hyphens (-), and underscores (_).
status	String	DB instance status. This parameter is only returned for pay-per-use instances.
datastore	Object	Database information. For details, see Table 5-16 .
mode	String	DB instance type. Currently, only the cluster type is supported.
configuration_id	String	Parameter template ID.
port	String	Database port, which is the same as the request parameter.
backup_strategy	Object	Automated backup policy. For details, see Table 5-17 .

Name	Type	Description
enterprise_project_id	String	Enterprise project ID, which is the same as the request parameter.
region	String	Region ID, which is the same as the request parameter.
availability_zone_mode	String	AZ type, which is the same as the request parameter.
master_availability_zone	String	Primary AZ ID.
vpc_id	String	VPC ID, which is the same as the request parameter.
security_group_id	String	Security group ID, which is the same as the request parameter.
subnet_id	String	Subnet ID, which is the same as the request parameter.
flavor_ref	String	Specification code, which is the same as the request parameter. For details, see Table 5-6 .
charge_info	Object	Billing mode, which is yearly/monthly or pay-per-use. For details, see Table 5-18 .

Table 5-16 datastore field data structure description

Name	Type	Description
type	String	DB Engine
version	String	DB version.

Table 5-17 backup_strategy field data structure description

Name	Type	Description
start_time	String	Backup time window. Automated backups will be triggered during the backup time window.
keep_days	Integer	Backup retention days.

Table 5-18 charge_info field data structure description

Name	Type	Description
charge_mode	String	Billing mode, which is yearly/monthly or pay-per-use.
period_num	Integer	Subscription duration, which is calculated by month. This parameter is valid when charge_mode is set to prePaid (this parameter is valid only for yearly/monthly instances).

 NOTE

The values of **region** and **master_availability_zone** are used as examples.

- Example normal response

```
{
  "instance":{
    "id":"5eebbb4c0f9f4a99b42ed1b6334569aain07",
    "name":"gaussdb-2d34",
    "status":"BUILD",
    "datastore":{
      "type":"gaussdb-mysql",
      "version":"8.0"
    },
    "mode":"Cluster",
    "configuration_id": "",
    "port":null,
    "backup_strategy":{
      "start_time":null,
      "keep_days":"7"
    },
    "enterprise_project_id": "0",
    "region":"aaa",
    "availability_zone_mode":"multi",
    "master_availability_zone":"aaa",
    "vpc_id":"f7ee62e2-9705-4523-ba49-a85ea1a1fa87",
    "security_group_id":"c7f69884-fe2b-4630-8114-70a11499d902",
    "subnet_id":"140af7bf-a9da-4dcf-8837-34199fd6d186"
    "charge_info":{
      "charge_mode":"postPaid"
    },
    "flavor_ref":"gaussdb.mysql.large.x86.4"
  },
  "job_id":"43672fe5-56bd-47f1-8fd1-595cded08a7c"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.2 Querying DB Instances

Function

This API is used to query instances according to search criteria. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying DB Instances](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances?id={id}&name={name}&type={type}&datastore_type={datastore_type}&vpc_id={vpc_id}&subnet_id={subnet_id}&offset={offset}&limit={limit}
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances?id=ed7cc6166ec24360a5ed5c5c9c2ed726in01&name=hy&type=Cluster&datastore_type=gaussdb-mysql&vpc_id=19e5d45d-70fd-4a91-87e9-b27e71c9891f&subnet_id=bd51fb45-2dc6-4296-8783-8623bfe89bb7&offset=0&limit=10
- Parameter description

Table 5-19 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
id	String	No	DB instance ID. The asterisk (*) is reserved for the system. If the instance ID starts with an asterisk (*), the value following asterisk (*) is used for fuzzy matching. Otherwise, the instance ID is used for exact matching.

Name	Type	Mandatory	Description
name	String	No	DB instance name. The asterisk (*) is reserved for the system. If the instance name starts with an asterisk (*), the value following asterisk (*) is used for fuzzy matching. Otherwise, the instance name is used for exact matching.
type	String	No	DB instance type to be queried. Currently, only the cluster type is supported.
datastore_type	String	No	DB type. Currently, only gaussdb-mysql is supported.
vpc_id	String	No	VPC ID. - Method 1: Log in to the VPC console and view the VPC ID on the VPC details page. - Method 2: See "Querying VPCs" in the <i>Virtual Private Cloud API Reference</i>.
subnet_id	String	No	Network ID of the subnet. - 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: See "Querying Subnets" in the <i>Virtual Private Cloud API Reference</i>.
offset	Integer	No	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.
limit	Integer	No	Number of records to be queried. The default value is 100 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .

Request

None

Response

- Normal response

Table 5-20 Parameter description

Name	Type	Description
instances	Array of objects	Instance information. For details, see Table 5-21 .
total_count	Integer	Total number of records.

Table 5-21 instances field data structure description

Name	Type	Description
id	String	DB instance ID.
name	String	DB instance name.
status	String	DB instance status.
private_ips	List<String>	Private IP address for write. It is a blank string until an ECS is created.
public_ips	List<String>	Public IP addresses.
port	String	Database port.
type	String	DB instance type. The value is Cluster .
region	String	Region where the DB instance is deployed.
datastore	Object	Database information. For details, see Table 5-22 .
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . The value is empty unless the instance creation is complete.
updated	String	Update time. The format is the same as that of the created field. The value is empty unless the instance creation is complete.
db_user_name	String	Default username.

Name	Type	Description
vpc_id	String	VPC ID.
subnet_id	String	Network ID of the subnet.
security_group_id	String	Security group ID.
flavor_ref	String	Specification code. For details, see Table 5-6 .
flavor_info	Object	Specification description.
volume	Object	Volume information. For details, see Table 5-23 .
backup_strategy	Object	Backup policy. For details, see Table 5-25 .
enterprise_project_id	String	Enterprise project ID.
time_zone	String	Time zone.
charge_info	Object	Billing mode, which is yearly/monthly or pay-per-use. By default, pay-per-use is used. For details, see Table 5-26 .

Table 5-22 datastore field data structure description

Name	Type	Description
type	String	DB engine.
version	String	DB version.

Table 5-23 volume field data structure description

Name	Type	Description
type	String	Disk type.
size	String	Used disk size in GB.

Table 5-24 flavor_ref field data structure description

Name	Type	Description
vcpus	String	Number of vCPUs.
ram	String	Memory size in GB.

Table 5-25 backup_strategy field data structure description

Name	Type	Description
start_time	String	Backup time window. Automated backups will be triggered during the backup time window.
keep_days	String	Backup retention days.

Table 5-26 charge_info field data structure description

Name	Type	Description
charge_mode	String	Billing mode. Values: • prePaid: indicates the yearly/monthly billing mode. • postPaid: indicates the pay-per-use billing mode.

 NOTE

The value of **region** is used as an example in the following response.

- Example normal response

```
{
  "total_count": 6,
  "instances": [
    {
      "id": "d738399de028480fabb2b8120d4e01a4in07",
      "status": "ACTIVE",
      "name": "oMoS_001",
      "port": 3306,
      "type": "Cluster",
      "private_ips": ["192.168.0.142"],
      "public_ips": ["10.154.219.187"],
      "db_user_name": "root",
      "region": "aaa",
      "datastore": {"type": "gaussdb-mysql", "version": "8.0"},
      "created": "2018-08-20T02:33:49+0800",
      "updated": "2018-08-20T02:33:50+0800",
      "volume": {
        "type": "POOL",
```



```
        "used_size": 100
      },
      "vpc_id": "f7ee62e2-9705-4523-ba49-a85ea1a1fa87",
      "subnet_id": "140af7bf-a9da-4dcf-8837-34199fd6d186",
      "security_group_id": "c7f69884-fe2b-4630-8114-70a11499d902",
      "flavor_ref": "gaussdb.mysql.c3.small.4",
      "backup_strategy": {"start_time": "19:00-20:00", "keep_days": 7},
      "charge_info": {
        "charge_mode": "postPaid"
      },
      "enterprise_project_id": "0",
      "time_zone": "",
    }
  ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.3 Querying DB Instances

Function

This API is used to query DB instances according to search criteria. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying DB Instances](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances

Table 5-27 URI 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 5-28 Query parameters

Parameter	Mandatory	Type	Description
id	No	String	Instance ID. The asterisk (*) is reserved for the system. If the instance ID starts with *, it indicates that fuzzy match is performed based on the value following *. Otherwise, the exact match is performed based on the instance ID. The value cannot contain only asterisks (*).
name	No	String	Instance name. The asterisk (*) is reserved for the system. If the instance name starts with *, it indicates that fuzzy match is performed based on the value following *. Otherwise, the exact match is performed based on the instance name. The value cannot contain only asterisks (*).
type	No	String	Instance type to be queried. Currently, only the cluster type is supported.
datastore_type	No	String	DB type. Currently, only gaussdb-mysql is supported.
vpc_id	No	String	VPC ID.
subnet_id	No	String	Network ID of the subnet.
private_ip	No	String	Private IP address.
readonly_private_ip	No	String	Private IP address for read.
proxy_ip	No	String	Proxy address.
offset	No	Integer	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records to be queried. The default value is 100 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .
tags	No	String	Query based on the instance tag key and value. • <i>{key}</i> indicates the tag key. • <i>{value}</i> indicates the tag value. To query instances with multiple tag keys and values, separate key-value pairs with commas (,). The key must be unique. Multiple keys are in AND relationship.

Request Parameters

Table 5-29 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token. The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 5-30 Response body parameters

Parameter	Type	Description
instances	Array of MysqlInstanceListInfo objects	Instance list information.
total_count	Integer	Total number of records.

Table 5-31 MysqlInstanceListInfo

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
status	String	Instance status.
private_ips	Array of strings	Private IP address for write. It is left blank until an ECS is created.
readonly_private_ips	Array of strings	Private IP addresses for read. It is left blank until an ECS is created.
proxy_ips	Array of strings	Read/write splitting IP addresses. It is left blank until proxy instances are created for an instance.
public_ips	Array of strings	Public IP addresses.

Parameter	Type	Description
port	String	Database port.
type	String	DB instance type. The value is Cluster .
region	String	Region where the DB instance is deployed.
datastore	MysqlDatastore object	Database information.
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
updated	String	Update time. The format is the same as that of the created field. NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
db_username	String	Default username.
vpc_id	String	VPC ID.
subnet_id	String	Network ID of the subnet.
security_group_id	String	Security group ID.
flavor_ref	String	Specification code.
flavor_info	MysqlFlavorInfo object	Flavor information.
volume	MysqlVolumeInfo object	Storage disk information.
backup_strategy	MysqlBackupStrategy object	Automated backup policy.
enterprise_project_id	String	Enterprise project ID.
time_zone	String	Time zone.

Parameter	Type	Description
charge_info	MysqlChargeInfo object	Billing mode, which is yearly/monthly or pay-per-use (default setting).
dedicated_resource_id	String	Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool.
tags	Array of InstanceTagItem objects	Tag list.

Table 5-32 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	DB engine. Currently, only gaussdb-mysql is supported.
version	String	DB version. To obtain details about supported DB engine versions, call the API for querying the DB engine versions .
kernel_version	String	Database kernel version.

Table 5-33 MysqlFlavorInfo

Parameter	Type	Description
vcpus	String	Number of vCPUs.
ram	String	Memory size in GB.

Table 5-34 MysqlVolumeInfo

Parameter	Type	Description
type	String	Disk type.
size	String	Used disk size in GB.

Table 5-35 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Automated backup start time. The automated backup will be triggered within one hour after the time specified by this parameter. The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00 .
keep_days	String	Automated backup retention days. Range: 1–732

Table 5-36 MysqlChargeInfo

Parameter	Type	Description
charge_mode	String	Billing mode. Values: • prePaid: indicates the yearly/monthly billing mode. • postPaid: indicates the pay-per-use billing mode.
period_type	String	Subscription period. This parameter is only available and mandatory when charge_mode is set to prePaid . Values: • month: The service is subscribed by month. • year: The service is subscribed by year.
period_num	Integer	This parameter is only available and mandatory when charge_mode is set to prePaid . Values: • When period_type is set to month, the parameter value ranges from 1 to 9. • When period_type is set to year, the parameter value ranges from 1 to 3.

Parameter	Type	Description
is_auto_renew	String	Whether automatic renewal is enabled for yearly/monthly DB instances. The renewal period is the same as the original period and the order will be automatically paid during the subscription renewal. • true: indicates that automatic renewal is enabled. • false: indicates that automatic renewal is disabled. The default value is false.
is_auto_pay	String	Whether the order will be automatically paid after yearly/monthly instances are created. This parameter does not affect the payment method of automatic renewal. • true: indicates the order will be automatically paid from your account. The default value is true. • false: indicates the order will be manually paid.

Table 5-37 InstanceTagItem

Parameter	Type	Description
key	String	Tag key.
value	String	Tag value.

Status code: 400**Table 5-38** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 5-39** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Example Request

Querying TaurusDB instances whose private IP addresses are 192.168.0.142

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances?
id=61a4ea66210545909d74a05c27a7179ein07&name=hyAbc&type=Cluster&datastore_type=gaussdb-
mysql&vpc_id=19e5d45d-70fd-4a91-87e9-
b27e71c9891f&subnet_id=bd51fb45-2dcb-4296-8783-8623bfe89bb7&private_ip=192.168.0.142&offset=0&li
mit=10&tags=taurusKey1=value1
```

Example Response

Status code: 200

NOTE

The value of **region** is used as an example in the following response.

Success.

```
{
  "total_count": 1,
  "instances": [ {
    "id": "d738399de028480fab2b8120d4e01a4in07",
    "name": "gaussdb-mysql-instance01",
    "status": "ACTIVE",
    "port": 3306,
    "type": "Cluster",
    "private_ips": [ "192.168.0.142" ],
    "db_user_name": "root",
    "region": "aaa",
    "datastore": {
      "type": "gaussdb-mysql",
      "version": "8.0",
      "kernel_version": "2.0.29.1"
    },
    "created": "2018-08-20T02:33:49_0800",
    "updated": "2018-08-20T02:33:49_0800",
    "volume": {
      "type": "POOL",
      "size": 100
    },
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",
    "flavor_ref": "gaussdb.mysql.xlarge.x86.4",
    "flavor_info": {
      "vcpus": 4,
      "ram": 16
    },
    "backup_strategy": {
      "start_time": "19:00-20:00",
      "keep_days": 7
    },
    "charge_info": {
      "charge_mode": "postPaid"
    },
    "enterprise_project_id": 0,
    "time_zone": "UTC",
  }
]
```

```
"tags" : [ ]
} ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.4 Deleting a DB Instance

Function

This API is used to delete a DB instance.

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Deleting/Unsubscribing from a DB Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
DELETE https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}
- Example
DELETE https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/dsfae23fsfdsae3435in01
- Parameter description

Table 5-40 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	Instance ID, which is compliant with the UUID format.

Request

None

Response

- Normal response

Table 5-41 Parameter description

Name	Type	Description
job_id	String	ID of the task for deleting a DB instance.

- Example normal response

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.5 Querying Details of a DB Instance

Function

This API is used to query the details of a specified DB instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Details of a DB Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}

Table 5-42 URI 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 5-43 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 5-44 Response body parameters

Parameter	Type	Description
instance	MysqlInstanceInfoDetail object	Instance information.

Table 5-45 MysqlInstanceInfoDetail

Parameter	Type	Description
id	String	Instance ID.
name	String	DB instance name.
project_id	String	Project ID of a tenant in a region.
status	String	DB instance status. Values: • BUILD: The DB instance is being created. • ACTIVE: The DB instance is normal. • FAILED: The DB instance is abnormal. • FROZEN: The DB instance is frozen. • MODIFYING: The DB instance is being scaled up. • REBOOTING: The DB instance is being rebooted. • RESTORING: The DB instance is being restored. • MODIFYING INSTANCE TYPE: The DB instance is changing from primary to standby. • SWITCHOVER: A primary/standby switchover is being performed. • MIGRATING: The DB instance is being migrated. • BACKING UP: The DB instance is being backed up. • MODIFYING DATABASE PORT: The database port is being changed. • STORAGE FULL: The DB instance storage space is full.
port	String	Database port.
alias	String	Instance description.
type	String	Instance type. The value is Cluster .

Parameter	Type	Description
charge_info	MysqlInstanceChargeInfo object	Billing mode, which is yearly/monthly or pay-per-use (default setting).
node_count	Integer	Number of nodes.
datastore	MysqlDatastore object	Database information.
backup_used_space	Double	Used backup space in GB.
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
updated	String	Update time. The format is the same as that of the created field. NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
private_write_ips	Array of strings	Private IP address for write.
private_dns_names	Array of strings	Private domain names of the instance. After a DB instance is created, you need to manually apply for a private domain name, or the private domain name is left blank.
public_ips	String	Public IP address of the instance.
db_username	String	Default username.
vpc_id	String	VPC ID.
subnet_id	String	Network ID of the subnet.
security_group_id	String	Security group ID.
configuration_id	String	ID of the parameter template used for creating an instance or ID of the latest parameter template that is applied to an instance.

Parameter	Type	Description
backup_strategy	MysqlBackupStrategy object	Automated backup policy.
nodes	Array of MysqlInstanceNodeInfo objects	Node information.
enterprise_project_id	String	Enterprise project ID.
time_zone	String	Time zone.
az_mode	String	AZ type. Values: • single: single AZ • multi: multiple AZs
master_az_code	String	Primary AZ.
maintenance_window	String	Maintenance window in the UTC format.
tags	Array of MysqlTags objects	Tags for managing instances.
dedicated_resource_id	String	Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool.
proxies	Array of MysqlProxyInfo objects	Proxy instance information.

Table 5-46 MysqlInstanceChargeInfo

Parameter	Type	Description
charge_mode	String	Billing mode.
order_id	String	Order ID.

Table 5-47 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	DB engine. Currently, only gaussdb-mysql is supported.
version	String	DB version. For details about supported DB versions, see Querying Version Information About a DB Engine .
kernel_version	String	DB kernel version.

Table 5-48 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Automated backup start time. The automated backup will be triggered within one hour after the time specified by this parameter. The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00.
keep_days	String	Automated backup retention days. Range: 1–732

Table 5-49 MysqlInstanceNodeInfo

Parameter	Type	Description
id	String	Instance ID.
name	String	Node name.
type	String	Node type. Values: • master: primary node • slave: read replica
status	String	Node status.
port	Integer	Database port.

Parameter	Type	Description
private_read_ips	Array of strings	Private IP address for read of the node.
volume	MysqlInstanceNodeVolumeInfo object	Storage disk information.
az_code	String	AZ.
region_code	String	Region where the instance is located.
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
updated	String	Update time. The format is the same as that of the created field. NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
flavor_id	String	Specification ID.
flavor_ref	String	Specification code.
max_connections	String	Maximum number of connections.
vcpus	String	Number of vCPUs.
ram	String	Memory size in GB.
need_restart	Boolean	Whether to reboot the instance for the parameter modifications to take effect.
priority	Integer	Failover priority.

Table 5-50 MysqlInstanceNodeVolumeInfo

Parameter	Type	Description
type	String	Disk type.
used	String	Used disk size in GB.
size	Long	Disk size of the yearly/monthly instance in GB

Table 5-51 MysqlTags

Parameter	Type	Description
key	String	Tag key. The value can contain a maximum of 36 Unicode characters. The value cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed.
value	String	Tag value. It contains a maximum of 43 Unicode characters. The value can be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed.

Table 5-52 MysqlProxyInfo

Parameter	Type	Description
pool_id	String	Proxy instance ID.
name	String	Proxy instance name.
address	String	Proxy address.

Status code: 400**Table 5-53** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 5-54** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

Querying details of a specified DB instance

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
436aaafb689c4250a9a5bb33cb271e8cin07
```

Example Response

Status code: 201

NOTE

The values of **region_code** and **az_code** are used as examples.

Success.

```
{  
  "instance": {  
    "id": "d738399de028480fabb2b8120d4e01a4in07",  
    "name": "gaussdb-mysql-instance01",  
    "alias": "",  
    "status": "ACTIVE",  
    "project_id": "3cedfc54-b105-4652-a4e0-847b11576628",  
    "enterprise_project_id": 0,  
    "type": "Cluster",  
    "charge_info": {  
      "charge_mode": "postPaid",  
      "order_id": ""  
    },  
    "node_count": 2,  
    "datastore": {  
      "type": "gaussdb-mysql",  
      "version": "8.0",  
      "kernel_version": "2.0.29.1"  
    },  
    "created": "2022-07-14T16:26:58+0800",  
    "updated": "2022-07-18T14:20:33+0800",  
    "public_ips": [ "10.154.219.187" ],  
    "private_write_ips": [ "192.168.0.142" ],  
    "private_dns_names": [ "d738399de028480fabb2b8120d4e01a4in07.internal.cn-  
xianhz-1.gaussdbformysql.myhuaweicloud.com" ],  
    "db_user_name": "root",  
    "port": 3306,  
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b115766b58",  
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",  
    "backup_strategy": {  
      "start_time": "19:00-20:00",  
      "keep_days": 7  
    },  
    "nodes": [ {  
      "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",  
      "name": "gauss-d616-lb07_node01",  
      "type": "master",  
      "status": "ACTIVE",  
      "port": 3306,  
      "private_read_ips": [ "192.168.0.163" ],  
      "volume": {  
        "type": "POOL",  
        "used": 0.07  
      },  
      "az_code": "az1xahz",  
      "region_code": "cn-xianhz-1",  
      "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",  
      "flavor_ref": "gaussdb.mysql.xlarge.x86.4",  
      "max_connections": 1500,  
    }  
  ],  
  "az_code": "az1xahz",  
  "region_code": "cn-xianhz-1",  
  "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",  
  "flavor_ref": "gaussdb.mysql.xlarge.x86.4",  
  "max_connections": 1500,  
}
```

```
{
  "vcpus" : 4,
  "ram" : 16,
  "need_restart" : false,
  "priority" : 1,
  "created" : "2022-07-14T16:26:58+0800",
  "updated" : "2022-07-18T09:24:18+0800"
}, {
  "id" : "799a0f2fa49a4151bf9f7063c1fbba35no07",
  "name" : "gauss-d616-lb07_node02",
  "type" : "slave",
  "status" : "ACTIVE",
  "port" : 3306,
  "private_read_ips" : [ "192.168.0.162" ],
  "volume" : {
    "type" : "POOL",
    "used" : 0.07
  },
  "az_code" : "az1xahz",
  "region_code" : "cn-xianhz-1",
  "flavor_id" : "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref" : "gaussdb.mysqlxlarge.arm.2.ha",
  "max_connections" : 1500,
  "vcpus" : 1,
  "ram" : 4,
  "need_restart" : false,
  "priority" : 1,
  "created" : "2022-07-14T16:26:58+0800",
  "updated" : "2022-07-18T09:36:18+0800"
} ],
"time_zone" : "UTC+08:00",
"backup_used_space" : 0.24,
"az_mode" : "single",
"master_az_code" : "az1",
"maintenance_window" : "18:00-22:00",
"tags" : [ ],
"configuration_id" : "53570e0de54e40c5a15f331aa5sd2176pr07",
"dedicated_resource_id" : "",
"proxies" : [ {
  "pool_id" : "dab1cfc5150c4d1ca0e8c6596bfc0d8cpo01",
  "address" : "192.168.10.76",
  "name" : "proxy-name"
} ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.6 Querying Details of DB Instances in Batches

Function

This API is used to query details of DB instances in batches. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Details of DB Instances in Batches](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/details

Table 5-55 URI 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 5-56 Query parameters

Parameter	Mandatory	Type	Description
instance_ids	Yes	String	Instance ID. A maximum of 20 instance IDs can be entered at a time. Separate them with commas (,).

Request Parameters

Table 5-57 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 5-58 Response body parameters

Parameter	Type	Description
instances	Array of MysqlInstanceInfoDetail objects	Instance details.

Table 5-59 MysqlInstanceInfoDetail

Parameter	Type	Description
id	String	Instance ID.
name	String	Instance name.
project_id	String	Project ID of a tenant in a region.

Parameter	Type	Description
status	String	Instance status. Values: • BUILD: The DB instance is being created. • ACTIVE: The DB instance is normal. • FAILED: The instance failed to be created. • FROZEN: The DB instance is frozen. • MODIFYING: The DB instance is being scaled up. • REBOOTING: The DB instance is being rebooted. • RESTORING: The DB instance is being restored. • SWITCHOVER: A primary/standby switchover is being performed. • MIGRATING: The DB instance is being migrated. • BACKING UP: The DB instance is being backed up. • MODIFYING DATABASE PORT: The database port is being changed. • STORAGE FULL: The DB instance storage space is full.
port	String	Database port.
alias	String	Instance description.
type	String	Instance type. The value is Cluster .
charge_info	MysqlInstanceChargeInfo object	Billing mode, which is yearly/monthly or pay-per-use (default setting).
node_count	Integer	Number of nodes.
datastore	MysqlDatastoreWithKernelVersion object	Database information.
backup_used_space	Double	Used backup space in GB.

Parameter	Type	Description
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
updated	String	Update time. The format is the same as that of the created field. NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
private_write_ips	Array of strings	Private IP address for write.
private_dns_names	Array of strings	Private domain names of the instance. After a DB instance is created, you need to manually apply for a private domain name, or the private domain name is left blank.
public_ips	String	Public IP address of the instance.
db_username	String	Default username.
vpc_id	String	VPC ID.
subnet_id	String	Network ID of the subnet.
security_group_id	String	Security group ID.
configuration_id	String	ID of the parameter template used for creating an instance or ID of the latest parameter template that is applied to an instance.
backup_strategy	MysqlBackupStrategy object	Automated backup policy.
nodes	Array of MysqlInstanceNodeInfo objects	Node information.
enterprise_project_id	String	Enterprise project ID.

Parameter	Type	Description
time_zone	String	Time zone.
az_mode	String	AZ type. Values: • single: single AZ • multi: multiple AZs
master_az_code	String	Primary AZ.
maintenance_window	String	Maintenance window in the UTC format.
tags	Array of MysqlTags objects	Tags for managing instances.
dedicated_resource_id	String	Dedicated resource pool ID. This parameter is only returned when the instance belongs to a dedicated resource pool.
proxies	Array of MysqlProxyInfo objects	Proxy instance information.

Table 5-60 MysqlInstanceChargeInfo

Parameter	Type	Description
charge_mode	String	Billing mode.
order_id	String	Order ID.

Table 5-61 MysqlDatastoreWithKernelVersion

Parameter	Type	Description
type	String	DB engine. Currently, only gaussdb-mysql is supported.
version	String	DB version. For details about supported DB versions, see Querying Version Information About a DB Engine .
kernel_version	String	Database kernel version.

Table 5-62 MysqlBackupStrategy

Parameter	Type	Description
start_time	String	Automated backup start time. The automated backup will be triggered within one hour after the time specified by this parameter. The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format. 1. The HH value must be 1 greater than the hh value. 2. The values of mm and MM must be the same and must be set to 00 .
keep_days	String	Automated backup retention days. Range: 1–732

Table 5-63 MysqlInstanceNodeInfo

Parameter	Type	Description
id	String	Instance ID.
name	String	Node name.
type	String	Node type. Values: • master: primary node • slave: read replica
status	String	Node status.
port	Integer	Database port.
private_read_ips	Array of strings	Private IP address for read of the node.
volume	MysqlInstanceNodeVolumeInfo object	Storage disk information.
az_code	String	AZ.
region_code	String	Region where the instance is located.

Parameter	Type	Description
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
updated	String	Update time. The format is the same as that of the created field. NOTE The value is empty when the DB instance is being created. After the DB instance is created, the value is not empty.
flavor_id	String	Specification ID.
flavor_ref	String	Specification code.
max_connections	String	Maximum number of connections.
vcpus	String	Number of vCPUs.
ram	String	Memory size in GB.
need_restart	Boolean	Whether to reboot the instance for the parameter modifications to take effect.
priority	Integer	Failover priority.

Table 5-64 MysqlInstanceNodeVolumeInfo

Parameter	Type	Description
type	String	Disk type.
used	String	Used disk size in GB.
size	Long	Disk size of the yearly/monthly instance in GB

Table 5-65 MysqlTags

Parameter	Type	Description
key	String	Tag key. The value can contain a maximum of 36 Unicode characters. The value cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed.
value	String	Tag value. It contains a maximum of 43 Unicode characters. The value can be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed.

Table 5-66 MysqlProxyInfo

Parameter	Type	Description
pool_id	String	Proxy instance ID.
name	String	Proxy instance name.
address	String	Proxy address.

Status code: 400**Table 5-67** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 5-68** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

Querying details of DB instances in batches

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/details?  
instance_ids=436aaafb689c4250a9a5bb33cb271e8cin07,d738399de028480fabb2b8120d4e01a4in07
```

Example Response

Status code: 200

Success.

```
{  
  "instances": [ {  
    "id": "d738399de028480fabb2b8120d4e01a4in07",  
    "name": "gaussdb-mysql-instance01",  
    "alias": "",  
    "status": "ACTIVE",  
    "project_id": "3cedfc54-b105-4652-a4e0-847b11576628",  
    "enterprise_project_id": 0,  
    "type": "Cluster",  
    "charge_info": {  
      "charge_mode": "postPaid",  
      "order_id": ""  
    },  
    "node_count": 2,  
    "datastore": {  
      "type": "gaussdb-mysql",  
      "version": "8.0",  
      "kernel_version": "2.0.29.1"  
    },  
    "created": "2022-07-14T16:26:58+0800",  
    "updated": "2022-07-18T14:20:33+0800",  
    "public_ips": [ "10.154.219.187" ],  
    "private_write_ips": [ "192.168.0.142" ],  
    "private_dns_names": [ "11684a0e59e94bceba7880d58cfb07b5in07.internal.cn-  
xianhz-1.gaussdbformysql.myhuaweicloud.com" ],  
    "db_user_name": "root",  
    "port": 3306,  
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b115766b58",  
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",  
    "backup_strategy": {  
      "start_time": "19:00-20:00",  
      "keep_days": 7  
    },  
    "nodes": [ {  
      "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",  
      "name": "gauss-d616-lb07_node01",  
      "type": "master",  
      "status": "ACTIVE",  
      "port": 3306,  
      "private_read_ips": [ "192.168.0.163" ],  
      "volume": {  
        "type": "POOL",  
        "used": 0.07  
      },  
      "az_code": "az1xahz",  
      "region_code": "cn-xianhz-1",  
      "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",  
      "flavor_ref": "gaussdb.mysql.xlarge.x86.4",  
      "max_connections": 1500,  
      "vcpus": 4,  
      "ram": 16,  
      "need_restart": false,  
      "priority": 1,  
      "created": "2022-07-14T16:26:58+0800",
```

```
{
  "updated": "2022-07-18T09:24:18+0800"
}, {
  "id": "799a0f2fa49a4151bf9f7063c1fbba35no07",
  "name": "gauss-d616-lb07_node02",
  "type": "slave",
  "status": "ACTIVE",
  "port": 3306,
  "private_read_ips": [ "192.168.0.162" ],
  "volume": {
    "type": "POOL",
    "used": 0.07
  },
  "az_code": "az1xahz",
  "region_code": "cn-xianhz-1",
  "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref": "gaussdb.mysql.xlarge.x86.4",
  "max_connections": 1500,
  "vcpus": 4,
  "ram": 16,
  "need_restart": false,
  "priority": 1,
  "created": "2022-07-14T16:26:58+0800",
  "updated": "2022-07-18T09:36:18+0800"
}],
"time_zone": "UTC+08:00",
"backup_used_space": 0.24,
"az_mode": "single",
"master_az_code": "az1",
"maintenance_window": "18:00-22:00",
"tags": [],
"configuration_id": "53570e0de54e40c5a15f331aa5sd2176pr07",
"dedicated_resource_id": "",
"proxies": [ {
  "pool_id": "dab1cfc5150c4d1ca0e8c6596bfc0d8cpo01",
  "address": "192.168.10.76",
  "name": "proxy-name"
} ]
}]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.7 Querying Details of a DB Instance

Function

This API is used to query the details of a specified DB instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Details of a DB Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/436aaafb689c4250a9a5bb33cb271e8cin07
- Parameter description

Table 5-69 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.

Request

None

Response

- Normal response

Table 5-70 Parameter description

Name	Type	Description
instance	Object	Instance information. For details, see Table 5-71 .

Table 5-71 instance field data structure description

Name	Type	Description
id	String	DB instance ID.
name	String	DB instance name.
project_id	String	Project ID of a tenant in a region.

Name	Type	Description
status	String	DB instance status. Values: If the value is BUILD , the DB instance is being created. If the value is ACTIVE , the DB instance is normal. If the value is FAILED , the DB instance is abnormal. If the value is FROZEN , the DB instance is frozen. If the value is MODIFYING , the DB instance is being scaled up. If the value is REBOOTING , the DB instance is being rebooted. If the value is RESTORING , the DB instance is being restored. If the value is MODIFYING INSTANCE TYPE , the DB instance is changing from primary to standby. If the value is SWITCHOVER , the primary/standby switchover is being performed. If the value is MIGRATING , the DB instance is being migrated. If the value is BACKING UP , the DB instance is being backed up. If the value is MODIFYING DATABASE PORT , the database port is being changed. If the value is STORAGE FULL , the instance storage space is full.
enterprise_project_id	String	Enterprise project ID.
type	String	DB instance type. Currently, only the cluster type is supported.
node_count	Integer	Number of nodes.
datastore	Object	Database information. For details, see Table 5-72 .
backup_used_space	Double	Used backup space in GB.

Name	Type	Description
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . The value is empty unless the instance creation is complete.
updated	String	Update time. The format is the same as that of the created field. The value is empty unless the instance creation is complete.
public_ips	String	Public IP address of the instance.
private_write_ips	Array of Lists	Private IP address for write.
db_user_name	String	Default username.
port	String	Database port.
vpc_id	String	VPC ID.
subnet_id	String	Network ID of the subnet.
security_group_id	String	Security group ID.
volume	Object	Disk information. For details, see Table 5-75 .
backup_strategy	Object	Backup policy. For details, see Table 5-73 .
nodes	Array of objects	Node information. For details, see Table 5-74 .
time_zone	String	Time zone.
az_mode	String	AZ type. It can be single or multi .
master_az_code	String	Primary AZ.
maintenance_window	String	Maintenance window in the UTC format.
configuration_id	String	ID of the parameter template used for creating an instance or ID of the latest parameter template that is applied to an instance.
tags	Array of objects	Tags for managing instances. For details, see Table 5-76 .

Table 5-72 datastore field data structure description

Name	Type	Description
type	String	DB engine.
version	String	DB version.

Table 5-73 backup_strategy field data structure description

Name	Type	Description
start_time	String	Backup time window. Automated backups will be triggered during the backup time window.
keep_days	Integer	Backup retention days.

Table 5-74 nodes field data structure description

Name	Type	Description
id	String	Node ID.
name	Array of objects	Node name.
type	String	Node type, which can be master or slave .
status	String	Node status.
port	Integer	Database port.
private_read_ips	Array of strings	Private IP address for read.
volume	Object	Disk information.
az_code	String	AZ.
region_code	String	Region where the DB instance is deployed.
created	String	DB instance creation time.
updated	String	Update time.
flavor_ref	String	Specification code. For details, see Table 5-6 .
max_connections	String	Maximum number of connections.

Name	Type	Description
vcpus	String	Number of vCPUs.
ram	String	Memory size in GB.
need_restart	Boolean	Whether to reboot the DB instance for the modifications to take effect.
priority	String	Failover priority.

Table 5-75 volume field data structure description

Name	Type	Description
type	String	Storage type. Currently, only POOL is supported.
used	String	Used storage size in GB.

Table 5-76 tags field data structure description

Name	Type	Description
type	String	Tag key. The value can contain a maximum of 36 Unicode characters. The value cannot be an empty string, a space, or left blank. Only uppercase letters, lowercase letters, digits, hyphens (-), and underscores (_) are allowed.
used	String	Tag value. The value contains a maximum of 43 Unicode characters and can also be an empty string. Only uppercase letters, lowercase letters, digits, periods (.), hyphens (-), and underscores (_) are allowed.

 NOTE

The values of **region_code** and **az_code** are used as examples.

- Example normal response

```
{
  "instance": {
    "id": "d2cda7b97a39488e8b30e3cea4066204in07",
    "name": "gauss-d616-lb07",
    "status": "FAILED",
    "project_id": "053f533ead80d5102f0cc012e8d468a4",
    "enterprise_project_id": "0",
    "type": "Cluster",
    "charge_info": {
```

```
"charge_mode": "postPaid",
"order_id": ""
},
"node_count": 2,
"datastore": {
  "type": "GaussDB(for MySQL)",
  "version": "8.0"
},
"created": "2020-07-21T09:13:56+0800",
"updated": "2020-07-21T09:27:54+0800",
"public_ips": "",
"private_write_ips": [
  "192.168.0.235"
],
"db_user_name": "root",
"port": "3306",
"vpc_id": "f7ee62e2-9705-4523-ba49-a85ea1a1fa87",
"subnet_id": "140af7bf-a9da-4dcf-8837-34199fd6d186",
"security_group_id": "c7f69884-fe2b-4630-8114-70a11499d902",
"backup_strategy": {
  "start_time": "00:00-00:00",
  "keep_days": "0"
},
"nodes": [
  {
    "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",
    "name": "gauss-d616-lb07_node01",
    "type": "master",
    "status": "FAILED",
    "port": 3306,
    "private_read_ips": [
      "192.168.0.163"
    ],
    "volume": {
      "type": "POOL",
      "used": "0.0"
    },
    "az_code": "az1xahz",
    "region_code": "cn-xianhz-1",
    "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
    "flavor_ref": "gaussdb.large.4",
    "max_connections": null,
    "vcpus": "1",
    "ram": "4",
    "need_restart": false,
    "priority": 1
  },
  {
    "id": "816459d771c444db9fa4c1d5c173cb1cno07",
    "name": "gauss-d616-lb07_node02",
    "type": "slave",
    "status": "FAILED",
    "port": 3306,
    "private_read_ips": [
      "192.168.0.160"
    ],
    "volume": {
      "type": "POOL",
      "used": "0.0"
    },
    "az_code": "az1xahz",
    "region_code": "cn-xianhz-1",
```

```
{
  "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref": "gaussdb.large.4",
  "max_connections": null,
  "vcpus": "1",
  "ram": "4",
  "need_restart": false,
  "priority": 1
},
{
  "time_zone": "UTC+08:00",
  "backup_used_space": 0,
  "az_mode": "single",
  "master_az_code": "az1xahz",
  "maintenance_window": "18:00-22:00"
}
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.8 Creating a Read Replica

Function

This API is used to create a read replica. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Creating a Read Replica](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/nodes/enlarge
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/dsf23fsd3ae3435in01/nodes/enlarge
- Parameter description

Table 5-77 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	Instance ID, which is compliant with the UUID format.

Request

Table 5-78 Parameter description

Name	Mandatory	Type	Description
priorities	Yes	List<Integer>	Failover priority of a read replica. Failover priority ranges from 1 for the first priority to 16 for the last priority. This priority determines the order in which read replicas are promoted when recovering from a primary node failure. Read replicas with the same priority have the same probability of being promoted to the new primary node.
is_auto_pay	No	String	Whether the order will be automatically paid after yearly/monthly instances are created. • true: indicates the order will be automatically paid from your account. The default value is true. • false: indicates the order will be manually paid.

- Request example

```
{  
  "priorities": [1],  
}
```

Response

- Normal response

Table 5-79 Parameter description

Name	Type	Description
instance_id	String	DB instance ID.
node_names	List<String>	Node name.
job_id	String	ID of the task for creating a read replica.
order_id	String	Order ID. This parameter is only returned for yearly/monthly instances.

- Example normal response

```
{
  "instance_id": "f381d0b539e644df8f5b0d3a62129515in07",
  "node_names": ["gauss-ccf5_node03"],
  "job_id": "0f6b6a9e-bd39-4e95-9374-e4d134e5a3d1"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.9 Deleting a Read Replica

Function

This API is used to delete a read replica. For multi-AZ deployment, the primary node and remaining read replicas must be located in different AZs after read replicas are deleted. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Deleting or Unsubscribing from a Read Replica](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
DELETE https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/nodes/{node_id}

- Example
DELETE https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/dsf23fsfsdae3435in01/nodes/d11ae66fsfsdaer3w3ino9
- Parameter description

Table 5-80 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	Instance ID, which is compliant with the UUID format.
node_id	Yes	Read-only node ID, which is compliant with the UUID format.

Request

None

Response

- Normal response

Table 5-81 Parameter description

Name	Type	Description
job_id	String	ID of the task for deleting a read replica.

- Example normal response

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.10 Scaling up Storage of a Yearly/Monthly DB Instance

Function

This API is used to scale up storage space of a yearly/monthly DB instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Scaling up Storage of a Yearly/Monthly DB Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/volume/extend
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/dsfae23fsfdsae3435in01/volume/extend
- Parameter description

Table 5-82 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	Instance ID, which is compliant with the UUID format.

Request

Table 5-83 Parameter description

Name	Mandatory	Type	Description
size	Yes	Integer	Storage space after expansion. The value ranges from 40 GB to 128,000 GB. The minimum increment for each scaling is 10 GB.
is_auto_pay	No	String	Whether the order will be automatically paid. true: indicates the order will be automatically paid from your account. The default value is true. false: indicates the order will be manually paid.

- Request example

```
{
  "size":50,
  "is_auto_pay":"true"
}
```

Response

- Normal response

Table 5-84 Parameter description

Name	Type	Description
size	Integer	Storage space after expansion.
order_id	String	Order ID.

- Example normal response

```
{
  "size":50,
  "order_id": "CS2006231950I8NQA"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.11 Changing a DB Instance Name

Function

This API is used to change a DB instance name. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Changing a DB Instance Name](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
PUT https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/name
- Example
PUT https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/name
- Parameter description

Table 5-85 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.

Request

Table 5-86 Parameter description

Name	Type	Mandatory	Description
name	String	Yes	DB instance name. Instances of the same type can have same names under the same tenant. The value consists of 4 to 64 characters and starts with a letter. It is case-sensitive and contains only letters, digits, hyphens (-), and underscores (_).

- Request example

```
{  
  "name": "gaussdb-name"  
}
```

Response

- Normal response

Table 5-87 Parameter description

Name	Type	Description
job_id	String	ID of the task for changing an instance name.

- Example normal response

```
{  
  "job_id": "0f6b6a9e-bd39-4e95-9374-e4d134e5a3d1"  
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.12 Resetting a Database Password

Function

This API is used to reset a database password. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Resetting a Database Password](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/password
- Example
POST https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/password
- Parameter description

Table 5-88 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	No	DB instance ID.

Request

Table 5-89 Parameter description

Name	Type	Man dato ry	Description
password	String	Yes	Database password. Values: The password consists of 8 to 32 characters and contains at least three types of the following: uppercase letters, lowercase letters, digits, and special characters ~!@#\$%^*_-=+?,()& You are advised to enter a strong password to improve security and prevent security risks such as brute force cracking. If you enter a weak password, the system automatically determines that the password is invalid.

- Request example

```
{
  "password": "Test_345612"
}
```

Response

- Normal response
None
- Example normal response

```
{}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.3.13 Modifying DB Instance Specifications

Function

This API is used to change DB instance specifications. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Changing DB Instance Specifications](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/action
- Example
POST https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/action
- Parameter description

Table 5-90 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	No	DB instance ID.

Request

Table 5-91 Parameter description

Name	Type	Mandatory	Description
resize_flavor	Object	Yes	For details, see Table 5-92 .

Name	Type	Mandatory	Description
is_auto_pay	String	No	Whether the order will be automatically paid when the specifications of yearly/monthly instances are changed. • true: indicates the order will be automatically paid from your account. The default value is true. • false: indicates the order will be manually paid.

Table 5-92 resize_flavor field data structure description

Name	Type	Mandatory	Description
spec_code	String	Yes	Specification code.

- Request example

```
{
  "resize_flavor": {
    "spec_code": "gaussdb.large.4"
  }
}
```

Response

- Normal response

Table 5-93 Parameter description

Name	Type	Description
job_id	String	ID of the task for changing DB instance specifications. This parameter is only returned for pay-per-use instances.

Name	Type	Description
order_id	String	ID of the order for changing DB instance specifications. This parameter is only returned for yearly/monthly instances.

- Example normal response

```
{
  "job_id": "0f6b6a9e-bd39-4e95-9374-e4d134e5a3d1"
}
```

Example Request

Changing instance specifications

```
POST https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/action
{
  "resize_flavor" : {
    "spec_code" : "taurus.large.4"
  }
}
```

Example Response

None

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.4 Backup Management

5.4.1 Modifying the Automated Backup Policy

Function

This API is used to modify the automated backup policy. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Configuring a Same-Region Backup Policy](#)).

- Learn how to [authorize and authenticate](#) it.

- Obtain the required [region and endpoint](#).

URI

- URI format
PUT https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/backups/policy/update
- Example
PUT https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/backups/policy/update
- Parameter description

Table 5-94 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	No	DB instance ID.

Request

Table 5-95 Parameter description

Name	Type	Mandatory	Description
backup_policy	object	Yes	Backup policy information. For details, see Table 5-96 .

Table 5-96 backup_policy field data structure description

Name	Type	Mandatory	Description
keep_days	Integer	Yes	Backup retention days. Value range: 1–732.

Name	Type	Mandatory	Description
start_time	String	Yes	Backup time window. Automated backups will be triggered during the backup time window. The value cannot be empty. It must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format. • 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. Example value: • 21:00-22:00
period	String	Yes	Backup cycle configuration. Data will be automatically backed up on the selected days every week. The value is a number separated by commas (,), indicating the days of the week. For example, the value 1,2,3,4 indicates that the backup period is Monday, Tuesday, Wednesday, and Thursday.
retention_num_backup_level1	Integer	No	Number of retained level-1 backups. The default value is 0. This parameter is mandatory when the level-1 backup function is enabled. This parameter is unavailable when the level-1 backup function is disabled. Values: • 0 • 1

- Request example

```
{
  "backup_policy": {
    "keep_days": 7,
    "start_time": "19:00-20:00",
    "period": "1,2,3,4,5"
  }
}
```

Response

- Normal response

Table 5-97 Parameter description

Name	Type	Description
status	String	Backup status. Values: • BUILDING: Modification in progress • COMPLETED: Modification completed • FAILED: Modification failed
instance_id	String	DB instance ID.
instance_name	String	DB instance name.

- Example normal response

```
{
  "status": "COMPLETED",
  "instance_id": "ef25188419f941309882d2986b2210b9in07",
  "instance_name": "gauss-fhc"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.4.2 Creating a Manual Backup

Function

This API is used to create a manual backup. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Creating a Manual Backup](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/backups/create
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/backups/create
- Parameter description

Table 5-98 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Request

Table 5-99 Parameter description

Name	Mandatory	Type	Description
instance_id	Yes	String	Instance ID, which is compliant with the UUID format.
name	Yes	String	Backup name. The value consists of 4 to 64 characters and starts with a letter. It is case-sensitive and contains only letters, digits, hyphens (-), and underscores (_).
description	No	String	Backup description. It contains up to 256 characters and cannot contain the following special characters: > <"&'=

- Request example

```
{  "instance_id": "d8e6ca5a624745bcb546a227aa3ae1cfin01",  "name": "backup-1",  "description": "manual backup"}
```

Response

- Normal response

Table 5-100 Parameter description

Name	Type	Description
backup	Object	Backup information. For details, see Table 5-101 .

Table 5-101 backup field data structure description

Name	Type	Description
id	String	Backup ID.
name	String	Backup name.
description	String	Backup description.
begin_time	String	Backup start time in the "yyyy-mm-ddThh:mm:ssZ" format, where "T" indicates the start time of the time field, and "Z" indicates the time zone offset.
status	String	Backup status. Values: • BUILDING: Backup in progress • COMPLETED: Backup completed • FAILED: Backup failed • AVAILABLE: Backup available
type	String	Backup type. Value: • manual: manual full backup
instance_id	String	DB instance ID.

- Example normal response

```
{
  "backup": {
    "id": "2f4ddb93-b901-4b08-93d8-1d2e472f30fe",
    "name": "backup-1",
    "begin_time": "2020-07-07T01:17:05+0800",
    "status": "BUILDING",
    "type": "manual",
    "instance_id": "d8e6ca5a624745bcb546a227aa3ae1cfin01",
    "description": "desc"
  }
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.4.3 Querying Backups

Function

This API is used to query backups according to search criteria. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Full Backups](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/backups?
instance_id={instance_id}&backup_id={backup_id}&backup_type={backup_type}&offset={offset}&limit={limit}&begin_time={begin_time}&end_time={end_time}
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/backups?
instance_id=c3ec2c6148ad4d71b1a8411a62df0d3cin07&backup_id=43e4feaab48f11e89039fa163ebaa7e4br01&backup_type=auto&offset=0&limit=10&begin_time=2020-07-06T10:41:14+0800&end_time=2020-07-16T10:41:14+0800
- Parameter description

Table 5-102 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	No	DB instance ID.
backup_id	String	No	Backup ID.

Name	Type	Mandatory	Description
backup_type	String	No	Backup type. Values: • auto: automated full backup • manual: manual full backup
offset	String	No	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.
limit	String	No	Number of records to be queried. The default value is 100 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .
begin_time	String	No	Query start time. The format is "yyyy-mm-ddThh:mm:ssZ". T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
end_time	String	No	Query end time. The format is "yyyy-mm-ddThh:mm:ssZ" and the end time must be later than the start time. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .

Request

None

Response

- Normal response

Table 5-103 Parameter description

Name	Type	Description
backups	Array of objects	Backup information. For details, see Table 5-104 .

Name	Type	Description
total_count	Integer	Total number of records.

Table 5-104 backups field data structure description

Name	Type	Description
id	String	Backup ID.
name	String	Backup name.
begin_time	String	Backup start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
end_time	String	Backup end time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
status	String	Backup status. Values: • BUILDING: Backup in progress • COMPLETED: Backup completed • FAILED: Backup failed • AVAILABLE: Backup available
take_up_time	Integer	Backup duration in minutes.
type	String	Backup type. Values: • auto: automated full backup • manual: manual full backup
size	Double	Backup size in MB.
datastore	Object	Database information. For details, see Table 5-105 .
instance_id	String	DB instance ID.

Name	Type	Description
backup_level	String	Backup level. This parameter is returned when the level-1 backup function is enabled. Values: • 1: level-1 backup • 2: level-2 backup • 0: Backup being created or creation failed

Table 5-105 datastore field data structure description

Name	Type	Description
type	String	DB engine.
version	String	DB version.

- Example normal response

```
{
  "backups": [{
    "id": "43e4feaab48f11e89039fa163ebaa7e4br01",
    "name": "TaurusDB-gauss-e747-20200705185048266",
    "begin_time": "2018-08-06T12:41:14+0800",
    "end_time": "2018-08-06T12:45:14+0800",
    "take_up_time": 2,
    "status": "COMPLETED",
    "type": "auto",
    "size": 2803,
    "datastore": {
      "type": "gaussdb-mysql",
      "version": "8.0"
    },
    "instance_id": "c3ec2c6148ad4d71b1a8411a62df0d3cin07",
    "backup_level": "2"
  }],
  "total_count": 1
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.4.4 Querying an Automated Backup Policy

Function

This API is used to query an automated backup policy. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying an Automated Backup Policy](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/backups/policy
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/backups/policy
- Parameter description

Table 5-106 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.

Request

None

Response

- Normal response

Table 5-107 Parameter description

Name	Type	Description
backup_policy	object	Backup policy information. For details, see Table 5-108 .

Table 5-108 backup_policy field data structure description

Name	Type	Description
keep_days	Integer	Backup retention days. Value range: 1–732. Minimum value: 1 . Maximum value: 732
start_time	String	Backup time window. Automated backups will be triggered during the backup time window. The value must be a valid value in the "hh:mm-HH:MM" format. The current time is in the UTC format.
period	String	Backup cycle configuration. Data will be automatically backed up on the selected days every week. The value is a number separated by commas (,), indicating the days of the week.
retention_num_backup_level1	Integer	Number of retained level-1 backups. This parameter is returned when level-1 backup is enabled.

- Example normal response

```
{
  "backup_policy": {
    "keep_days": 7,
    "start_time": "19:00-20:00",
    "period": "1,2",
    "retention_num_backup_level1": 1
  }
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.4.5 Querying Available Tables for Table-level PITR

Function

This API is used to query available tables for table-level PITR. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Available Tables for Table-level PITR](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/backups/restore/tables

Table 5-109 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Definition Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID . Constraints N/A Range The value contains 32 characters. Only letters and digits are allowed. Default Value N/A
instance_id	Yes	String	Definition Instance ID, which uniquely identifies an instance. Constraints N/A Range The value contains 36 characters with a suffix of in07 . Only letters and digits are allowed. Default Value N/A

Table 5-110 Query parameters

Parameter	Mandatory	Type	Description
restore_time	Yes	String	Definition Backup time point. Constraints The value is a Unix timestamp in milliseconds and represents UTC time. When specifying the parameter, convert the local time from your relevant time zone to a UTC timestamp first. For example, for a time in the Beijing time zone (UTC +08:00), subtract 8 hours to get the UTC timestamp. Range To obtain this value, see Querying the Restoration Time Range . Default Value N/A
last_table_info	Yes	String	Definition Whether data is restored to the most recent table. Constraints N/A Range • true: most recent table • false: time-specific table Default Value N/A
database_name	No	String	Definition Database name, which is used for fuzzy match. Constraints N/A Range N/A Default Value N/A

Parameter	Mandatory	Type	Description
table_name	No	String	Definition Table name, which is used for fuzzy match. Constraints N/A Range N/A Default Value N/A

Request Parameters

Table 5-111 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	Definition User token. To obtain this value, call the IAM API for obtaining a user token . The value of X-Subject-Token in the response header is the token value. Constraints N/A Range N/A Default Value N/A
X-Language	No	String	Definition Request language type. Constraints N/A Range - en-us - zh-cn Default Value en-us

Response Parameters

Status code: 200

Table 5-112 Response body parameters

Parameter	Type	Description
total_databases	Integer	Definition Total number of tables in an instance. Range N/A
databases	Array of RestoreDatabaseInfos objects	Definition Database information.

Table 5-113 RestoreDatabaseInfos

Parameter	Type	Description
name	String	Definition Database name. Range N/A
total_tables	Integer	Definition Total number of tables. Range N/A
tables	Array of RestoreDatabaseTableInfo objects	Definition Table information.

Table 5-114 RestoreDatabaseTableInfo

Parameter	Type	Description
name	String	Definition Table name. Range N/A

Status code: 400**Table 5-115** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 5-116** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

Querying available tables for table-level PITR

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/restore/tables?  
database_name=test&last_table_info=true&restore_time=1690890940000&table_name=t
```

Example Response**Status code: 200**

Success.

```
{  
  "total_databases" : 1,  
  "databases" : [ {  
    "name" : "test_db_1",  
    "total_tables" : 1,  
    "tables" : [ {  
      "name" : "t3"  
    } ]  
  } ]  
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.

Status Code	Description
500	Server error.

Error Code

For details, see [Error Codes](#).

5.5 Parameter Template Management

5.5.1 Querying Parameter Templates

Function

This API is used to query parameter templates, including all databases' default and custom parameter templates. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Parameter Templates](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{*project_id*}/configurations
- Example
GET https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/configurations
- Parameter description

Table 5-117 Parameter description

Name	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

None

Response

- Normal response

Table 5-118 Parameter description

Name	Type	Description
configurations	Array of objects	Parameter template list. For details, see Table 5-119 .
total_count	Integer	Total number of parameter templates.

Table 5-119 configuration field data structure description

Name	Type	Description
id	String	Parameter template ID.
name	String	Parameter template name.
description	String	Parameter template description.
datastore_version_name	String	DB version name.
datastore_name	String	DB name.
created	String	Creation time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
updated	String	Update time in the "yyyy-MM-ddTHH:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .

Name	Type	Description
user_defined	Boolean	Whether the parameter template is a custom template. • false: The parameter template is a default template. • true: The parameter template is a custom template.

- Example normal response

```
{
  "configurations":[
    {
      "id":"1ad028f5f6b8482483948860feb33339pr07",
      "name":"DBS_GaussDB_ParameterTemple_Apply_001",
      "description":"GaussDB-Test",
      "datastore_version_name":"8.0",
      "datastore_name":"gaussdb-mysql",
      "created":"2020-04-08 07:12:17",
      "updated":"2020-04-08 07:12:17",
      "user_defined":true,
    }
  ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.6 Quota Management

5.6.1 Querying the Instance Quotas of a Tenant

Function

This API is used to modify the resource quotas of a specified enterprise project. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying the Instance Quotas of a Tenant](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /mysql/v3/{project_id}/project-quotas

Table 5-120 URI parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. To obtain this value, see Obtaining a Project ID .

Table 5-121 Query parameters

Parameter	Mandatory	Type	Description
type	No	String	Resource type used to filter quotas. Its value can be instance .

Request Parameters

Table 5-122 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.
X-Language	No	String	Language.

Response Parameters

Status code: 200

Table 5-123 Response body parameters

Parameter	Type	Description
quotas	Object	Tenant instance quota information.

Table 5-124 project-quotas

Parameter	Type	Description
resources	Array of objects	Resource list objects.

Table 5-125 resource

Parameter	Type	Description
type	String	Quota of the specified type. The value is instance , which indicates the instance quota.
used	Integer	Number of created resources.
quota	Integer	Maximum resource quota.

Status code: 400**Table 5-126** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500**Table 5-127** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/quotas?type=instance
```

Example Response

Status code: 200

Success.

```
{
  "quotas": {
    "resources": [ {
      "type": "instance",
      "used": 4,
      "quota": 50
    } ]
  }
}
```

```
}  
}
```

Status Code

Status Code	Description
200	Success.
400	Client error.
500	Server error.

Error Code

For details, see [Error Codes](#).

5.6.2 Querying Resource Quotas

Function

This API is used to obtain the resource quotas of a specified enterprise project.
Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying the Resource Quotas of a Specified Enterprise Project](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/quotas
- Example
GET https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/
quotas
- Parameter description

Table 5-128 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
offset	No	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.
limit	No	Number of records to be queried. The default value is 10 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .
enterprise_project_name	No	Enterprise project name.

Request

None

Response

- Parameter description

Table 5-129 Parameter description

Name	Type	Description
quota_list	Array of objects	Quota information list. For details, see Table 5-130 .
total_count	Integer	Number of quota records.

Table 5-130 quota_list field data structure description

Name	Type	Description
enterprise_project_id	String	Enterprise project ID.
enterprise_project_name	String	Enterprise project name.
instance_quota	Integer	Quota of the DB instance quantity.

Name	Type	Description
vcpus_quota	Integer	Quota of vCPUs.
ram_quota	Integer	Memory quota in GB.
availability_instance_quota	Integer	Remaining quota of DB instances.
availability_vcpus_quota	Integer	Remaining quota of vCPUs.
availability_ram_quota	Integer	Remaining memory quota.

- Example response

```
"quota_list": [  
  {  
    "enterprise_project_id": "0",  
    "enterprise_project_name": "default",  
    "instance_quota": 20,  
    "vcpus_quota": 20,  
    "ram_quota": 40,  
    "availability_instance_quota": 1,  
    "availability_vcpus_quota": 4,  
    "availability_ram_quota": 8  
  },  
  {  
    "enterprise_project_id": "d72ebb42-9110-464c-a8e2-f9b9f349f80f",  
    "enterprise_project_name": "eps_auto_test",  
    "instance_quota": 0,  
    "vcpus_quota": 0,  
    "ram_quota": 0,  
    "availability_instance_quota": 1,  
    "availability_vcpus_quota": 4,  
    "availability_ram_quota": 8  
  }  
],  
"total_count": 2  
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.6.3 Configuring Resource Quotas

Function

This API is used to configure resource quotas for a specified enterprise project.
Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Configuring Resource Quotas for a Specified Enterprise Project](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/quotas
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/
quotas
- Parameter description

Table 5-131 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
quota_list	Yes	Quota details. Up to 10 quota records can be configured at a time. For details, see Table 5-132 .

Request

- Parameter description

Table 5-132 quota_list field data structure description

Name	Type	Description
enterprise_project_id	String	Enterprise project ID.
instance_quota	Integer	Quota of the DB instance quantity. Value range: 0–1000. (If there are already instances created, this parameter value must be greater than the number of existing instances.)

Name	Type	Description
vcpus_quota	Integer	Quota of vCPUs. Value range: 0–3600000. (If there are already instances created, this parameter value must be greater than the number of used vCPUs.)
ram_quota	Integer	Memory quota in GB. Value range: 0–19200000. (If there are already instances created, this parameter value must be greater than the used memory size.)

- Request example

```
{
  "quota_list": [
    {
      "enterprise_project_id": "0",
      "instance_quota": 1,
      "vcpus_quota": 4,
      "ram_quota": 8
    }
  ]
}
```

Response

- Parameter description

Table 5-133 Parameter description

Name	Type	Description
quota_list	Array of objects	Configured quota information. For details, see Table 5-134 .

Table 5-134 quota_list field data structure description

Name	Type	Description
enterprise_project_id	String	Enterprise project ID.
instance_quota	Integer	Quota of the DB instance quantity.
vcpus_quota	Integer	Quota of vCPUs.
ram_quota	Integer	Memory quota in GB.

- Example response

```
{
  "quota_list": [
    {
```

```
{
  "enterprise_project_id": "0",
  "instance_quota": 1,
  "vcpus_quota": 4,
  "ram_quota": 8
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.6.4 Modifying Resource Quotas

Function

This API is used to modify the resource quotas of a specified enterprise project. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Modifying the Resource Quotas of a Specified Enterprise Project](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
PUT https://{endpoint}/mysql/v3/{project_id}/quotas
- Example
PUT https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/quotas
- Parameter description

Table 5-135 Parameter description

Name	Mandator y	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Name	Mandatory	Description
quota_list	Yes	Enterprise project resource quotas to be updated. A maximum of 10 quotas can be updated at a time. For details, see Table 5-136 .

Request

- Parameter description

Table 5-136 quota_list field data structure description

Name	Type	Description
enterprise_project_id	String	Enterprise project ID.
instance_quota	Integer	Quota of the DB instance quantity. Value range: 0–1000. (If there are already DB instances created, this parameter value must be at least the number of existing DB instances.)
vcpus_quota	Integer	Quota of vCPUs. Value range: 0–3600000. (If there are already DB instances created, this parameter value must be at least the number of used vCPUs.)
ram_quota	Integer	Memory quota in GB. Memory quota in GB. Value range: 0–19200000. (If there are already DB instances created, this parameter value must be at least the used memory size.)

- Request example

```
{
  "quota_list": [
    {
      "enterprise_project_id": "0",
      "instance_quota": 1,
      "vcpus_quota": 4,
      "ram_quota": 8
    }
  ]
}
```

Response

- Parameter description

Table 5-137 Parameter description

Name	Type	Description
quota_list	Array of objects	Configured quota information. For details, see Table 5-138 .

Table 5-138 quota_list field data structure description

Name	Type	Description
enterprise_project_id	String	Enterprise project ID.
instance_quota	Integer	Quota of the DB instance quantity.
vcpus_quota	Integer	Quota of vCPUs.
ram_quota	Integer	Memory quota in GB.

- Example response

```
{
  "quota_list": [
    {
      "enterprise_project_id": "0",
      "instance_quota": 1,
      "vcpus_quota": 4,
      "ram_quota": 8
    }
  ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7 Database Proxy

5.7.1 Creating Proxy Instance

Function

This API is used to create a proxy instance in ELB mode. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Creating a Proxy Instance](#)).

- Proxy instances are unavailable for DB instances in a DeC.
- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{*instance_id*}/proxy
- Example
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/proxy
- Parameter description

Table 5-139 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
<i>instance_id</i>	Yes	DB instance ID.

Request**Table 5-140** Parameter description

Name	Mandatory	Type	Description
flavor_ref	Yes	String	Proxy specification code.
node_num	Yes	Integer	Number of proxy instance nodes. It is an integer from 2 to 32.

- Request example

```
{
  "flavor_ref ":"gaussdb.mysql.large.x86.4",
  "node_num ":2
}
```

Response

- Normal response

Table 5-141 Parameter description

Name	Type	Description
job_id	String	ID of the task for creating a proxy instance.

- Example normal response

```
{
  "job_id ":"3a4ea53b-3c6c-4f88-9dd0-e21ed77b7e6a"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7.2 Deleting a Proxy Instance

Function

This API is used to delete a proxy instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Deleting a Proxy Instance](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).
- Proxy instances are unavailable for DB instances in a DeC.

URI

- URI format
DELETE https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/proxy
- Example
DELETE https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/dsfae23fsfdsae3435in01/proxy
- Parameter description

Table 5-142 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	Yes	Instance ID, which is compliant with the UUID format.

Request

None

Response

- Normal response

Table 5-143 Parameter description

Name	Type	Description
job_id	String	ID of the task for deleting a proxy instance.

- Example normal response

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7.3 Querying Information About a Proxy Instance

Function

This API is used to query information of a proxy instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Proxy Instances](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).
- Proxy instances are unavailable for DB instances in a DeC.

URI

GET /v3/{project_id}/instances/{instance_id}/proxy

Table 5-144 URI 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 5-145 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.
X-Language	No	String	Language.

Response Parameters

Status code: 200

Table 5-146 Response body parameters

Parameter	Type	Description
proxy	MysqlProxy object	Proxy instance information.
master_node	MysqlProxyNode object	Primary node information.

Parameter	Type	Description
readonly_nodes	Array of MysqlProxyNodes objects	Read replica information.

Table 5-147 MysqlProxy

Parameter	Type	Description
pool_id	String	Proxy instance ID.
status	String	Operating status of the proxy instance. Value: closed , open , frozen , opening , closing , enlarging , freezing , or unfreezing .
address	String	Proxy address.
port	Integer	Proxy port information.
pool_status	String	Proxy instance status. Value: ACTIVE , BUILD , FAILED , or DELETED .
delay_threshold_in_seconds	Integer	Delay threshold in seconds.
elb_vip	String	Virtual IP address in ELB mode.
eip	String	EIP information.
vcpus	String	Number of vCPUs of the proxy instance.
ram	String	Memory size of the proxy instance.
node_num	Integer	Number of proxy nodes.
mode	String	Proxy instance mode. The value is Cluster .
nodes	Array of MysqlProxyNodes objects	Proxy node information.
flavor_ref	String	Proxy specifications.
name	String	Proxy instance name.

Table 5-148 MysqlProxyNodes

Parameter	Type	Description
id	String	Proxy node ID.

Parameter	Type	Description
status	String	Proxy node status. Value: normal , abnormal , creating , or deleted .
name	String	Proxy node name.
role	String	Role of the proxy node. It can be master or slave .
az_code	String	AZ.
frozen_flag	Integer	Whether the proxy node is frozen. It can be 0 (unfrozen), 1 (frozen), or 2 (deleted after being frozen).

Table 5-149 MysqlProxyNode

Parameter	Type	Description
id	String	Node ID.
instance_id	String	Instance ID.
status	String	Node status.
name	String	Node name.
weight	Integer	Read weight of the node.
available_zones	Array of MysqlProxyAvailable objects	AZ information.

Table 5-150 MysqlProxyAvailable

Parameter	Type	Description
code	String	AZ code.
description	String	AZ description.

Status code: 400**Table 5-151** Response body parameters

Parameter	Type	Description
error_code	String	Error code.

Parameter	Type	Description
error_msg	String	Error message.

Status code: 500

Table 5-152 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07/proxy
```

Example Response

Status code: 200

Success.

```
{
  "proxy": {
    "pool_id": "2e7cf21d14794bafab623a334efd9ad8po01",
    "status": "open",
    "address": "192.168.125.69",
    "port": 3306,
    "pool_status": "ACTIVE",
    "delay_threshold_in_seconds": 30,
    "elb_vip": "192.168.125.60",
    "eip": "192.168.125.50",
    "vcpus": 4,
    "ram": 8,
    "node_num": 2,
    "mode": "Cluster",
    "nodes": {
      "id": "db53a238a02240c49365e72e284a4890pn01",
      "name": "PROXY-2e7cf21d14794bafab623a334efd9ad8po01_0",
      "role": "master",
      "az_code": "az1xahz",
      "status": "ACTIVE",
      "frozen_flag": 0
    },
    "name": "proxy-name"
  },
  "master_node": {
    "id": "5ee8010ab992460d8d9cffcc5edabb59no07",
    "instance_id": "7a871d6d494e4327ad2e326afb591108in07",
    "status": "ACTIVE",
    "name": "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node01",
    "weight": 0,
    "available_zones": {
      "code": "az1xahz",
      "description": "AZ1"
    }
  }
}
```

```
}
"readonly_nodes" : {
  "id" : "d23535333138462880bfa1838dfced2no07",
  "instance_id" : "7a871d6d494e4327ad2e326afb591108in07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node02",
  "weight" : 100,
  "available_zones" : {
    "code" : "az1xahz",
    "description": "AZ1"
  }
}
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7.4 Querying Proxy Instance Information

Function

This API is used to query information of a proxy instance. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Proxy Instances](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).
- Proxy instances are unavailable for DB instances in a DeC.

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/proxy
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/436aaafb689c4250a9a5bb33cb271e8cin07/proxy
- Parameter description

Table 5-153 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.

Request

None

Response

- Normal response

Table 5-154 Parameter description

Name	Type	Description
proxy	Object	Proxy instance information. For details, see Table 5-155 .
master_node	Object	Primary node. For details, see Table 5-156 .
readonly_nodes	Array of Object	Read replica information. For details, see Table 5-157 .

Table 5-155 proxy field data structure description

Name	Type	Description
pool_id	String	Proxy instance ID.
status	String	Whether the proxy instance is enabled. It can be closed , open , frozen , opening , closing , enlarging , freezing , or unfreezing .
address	String	Proxy address.
port	Integer	Proxy port information.

Name	Type	Description
pool_status	String	Proxy instance status. It can be abnormal , normal , creating , or deleted .
delay_threshold_in_seconds	Integer	Delay threshold in seconds.
elb_vip	String	Virtual IP address in ELB mode.
eip	String	EIP information.
vcpus	String	Number of vCPUs of the proxy instance.
ram	String	Memory size of the proxy instance.
node_num	Integer	Number of proxy nodes.
mode	String	Proxy instance mode. The value is Cluster .
nodes	Object	Proxy node information. For details, see Table 5-158 .
flavor_ref	String	Proxy specification code.

Table 5-156 master_node data structure description

Name	Type	Description
id	String	Primary node ID.
instance_id	String	DB instance ID.
status	String	Primary node status.
name	String	Primary node name.
weight	Integer	Read/write splitting weight of the primary node.
available_zones	Array of object	AZ information. For details, see Table 5-159 .

Table 5-157 readonly_nodes field data structure description

Name	Type	Description
id	String	Read replica ID.
instance_id	String	DB instance ID.

Name	Type	Description
status	String	Read replica status.
name	String	Read replica name.
weight	Integer	Read weight of read replicas.
available_zones	Array of object	AZ information.

Table 5-158 nodes field data structure description

Name	Type	Description
id	String	Proxy node ID.
status	String	Proxy node status. It can be normal , abnormal , creating , or deleted .
name	String	Proxy node name.
role	String	Role of the proxy node. It can be master or slave .
az_code	String	AZ.
frozen_flag	Integer	Whether the proxy node is frozen. It can be 0 (unfrozen), 1 (frozen), or 2 (deleted after being frozen).

Table 5-159 available_zones field data structure description

Name	Type	Description
code	String	AZ code.
description	String	AZ description.

- Example normal response

```
{
  "proxy":{
    "pool_id":null,
    "status":"closed",
    "address":null,
    "port":null,
    "pool_status":null,
    "delay_threshold_in_seconds":null,
    "elb_vip":null,
    "eip":null,
```

```
"vcpus":null,
"ram":null,
"node_num":null,
"mode":null,
"nodes":[
],
"flavor_ref": "gaussdb.proxy.xlarge.arm.2"
},
"master_node":{
"id":"294daeb0ec9e4c4eacaf2c6dbd8246a9no07",
"instance_id":"71215aadf19c428db088e51b157583f2in07",
"status":"ACTIVE",
"name":"BUG-gauss-dw_node01",
"weight":null,
"available_zones":[
{
"code":"az1xahz",
"description":"az1xahz"
}
]
},
"readonly_nodes":[
{
"id":"b36d70cc3c3b4ef680e34c5b25b168dano07",
"instance_id":"71215aadf19c428db088e51b157583f2in07",
"status":"ACTIVE",
"name":"BUG-gauss-dw_node02",
"weight":null,
"available_zones":[
{
"code":"az1xahz",
"description":"az1xahz"
}
]
}
]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7.5 Querying Proxy Instance Specifications

Function

This API is used to query proxy instance specifications. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Proxy Instance Specifications](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).
- Proxy instances are unavailable for DB instances in a DeC.

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/proxy/flavors
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/436aaafb689c4250a9a5bb33cb271e8cin07/proxy/flavors
- Parameter description

Table 5-160 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.

Request

None

Response

- Normal response

Table 5-161 Parameter description

Name	Type	Description
proxy_flavor_groups	Array of Object	Proxy specification groups. For details, see Table 5-162 .

Table 5-162 proxy_flavor_groups field data structure description

Name	Type	Description
group_type	String	Specification group type. It can be x86 or arm .
proxy_flavors	Array of Object	Proxy specifications. For details, see Table 5-163 .

Table 5-163 proxy_flavors field data structure description

Name	Type	Description
id	String	Proxy specification ID.
spec_code	String	Proxy specification code.
vcpus	String	Number of vCPUs. For example, the value 1 indicates 1 vCPU.
ram	String	Memory size in GB.
db_type	String	Database type.
az_status	Map<String, String>	key indicates the AZ ID and value indicates the status of the AZ where the proxy specifications reside. It can be normal or unsupported .

- Example normal response

```
{
  "proxy_flavor_groups": [
    {
      "group_type": "x86",
      "proxy_flavors": [
        {
          "id": "19be4c5d-d363-3342-bdbc-0dd9dbf7fafe",
          "spec_code": "gaussdb.proxy.large.x86.2",
          "vcpus": "2",
```

```
"ram":"4",
"db_type":"Proxy",
"az_status":{
  "az1xahz":"normal"
}
}
],
{
  "group_type":"arm",
  "proxy_flavors":[
    {
      "id":"2ff9a704-f238-3e7a-9ed2-208c2542c8b9",

      "spec_code":"gaussdb.proxy.large.arm.2",
      "vcpus":"2",
      "ram":"4",
      "db_type":"Proxy",
      "az_status":{
        "az1xahz":"normal"
      }
    }
  ]
}
]
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.7.6 Adding Proxy Nodes

Function

This API is used to add proxy nodes. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Adding Proxy Nodes](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).
- Proxy instances are unavailable for DB instances in a DeC.

URI

- URI format
POST https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/proxy/enlarge
- Example
post https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/enlarge
- Parameter description

Table 5-164 Parameter description

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 is compliant with the UUID format.

Request

Table 5-165 Parameter description

Parameter	Mandatory	Type	Description
node_num	Yes	Integer	The number of proxy nodes to be added. The value is an integer from 1 to 30. Restrictions: The total number of proxy nodes for an instance is no more than 32.

- Request example

```
{  
  "node_num" : 2  
}
```

Response

- Normal response

Table 5-166 Parameter description

Parameter	Type	Description
job_id	String	Task ID.

- Example normal response

```
{  
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"  
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.8 Log Management

5.8.1 Querying Database Error Logs

Function

This API is used to query database error logs. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Error Logs](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/errorlog?offset={offset}&limit={limit}&level={level}&start_date={start_date}&end_date={end_date}&node_id={node_id}
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/errorlog?offset=0&limit=100&level=ALL&start_date=2018-08-06T10:41:14+0800&end_d

ate=2018-08-07T10:41:14+0800&node_id=cc07c60e94ec4575989840e648fb4f66no07

- Parameter description

Table 5-167 Parameter description

Name	Type	Mandatory	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
instance_id	String	Yes	DB instance ID.
node_id	String	Yes	Instance node ID.
start_date	String	Yes	Start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
end_date	String	Yes	End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Only error logs generated within the last month can be queried.
offset	Integer	No	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. The default value is 0 , indicating that the query starts from the first piece of data. The value must be an integer and the minimum value is 0 .
limit	Integer	No	Number of records to be queried. The default value is 10 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .

Name	Type	Mandatory	Description
level	String	No	Log level. The default value is ALL . Values: • ALL • INFO • WARNING • ERROR • FATAL • NOTE

Request

None

Response

- Normal response

Table 5-168 Parameter description

Name	Type	Description
error_log_list	Array of objects	Error log details. For details, see Table 3.
total_record	Integer	Total number of records.

Table 5-169 error_log_list parameter description

Name	Type	Description
node_id	String	Node ID.
time	String	Time in the UTC format.
level	String	Log level. • ALL • INFO • WARNING • ERROR • FATAL • NOTE
content	String	Error log content.

- Example normal response

```
{
  "error_log_list":[
    {
      "node_id":"cc07c60e94ec4575989840e648fb4f66no07",
      "time":" 2021-03-06T12:07:05",
      "level":"ERROR",
      "content":"[MY013508] [Repl] do failed: 1"
    }
  ],
  "total_record":15
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.8.2 Querying Database Error Logs

Function

This API is used to query database error logs. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Error Logs](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/errorlog

Table 5-170 URI 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 5-171 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 the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 .
end_date	Yes	String	End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the offset is +0800 . Only error logs generated within the last month can be queried.
offset	No	Integer	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.
limit	No	Integer	Number of records to be queried. The default value is 100 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .

Parameter	Mandatory	Type	Description
level	No	String	Log level. The default value is ALL . Values: • ALL • INFO • WARNING • ERROR • FATAL • NOTE
node_id	Yes	String	Node ID.

Request Parameters

Table 5-172 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.
X-Language	No	String	Language.

Response Parameters

Status code: 200

Table 5-173 Response body parameters

Parameter	Type	Description
error_log_list	Array of MysqlErrorLogList objects	Error log details.
total_record	Integer	Total number of records.

Table 5-174 MysqlErrorLogList

Parameter	Type	Description
node_id	String	Node ID.
time	String	Time in the UTC format.

Parameter	Type	Description
level	String	Log level. • ALL • INFO • WARNING • ERROR • FATAL • NOTE
content	String	Error log content.

Status code: 400

Table 5-175 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 5-176 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07/errorlog?offset=0&limit=1&level=ALL&start_date=2022-07-10T00:00:00+0800&end_date=2022-07-19T00:00:00+0800&node_id=cc07c60e94ec4575989840e648fb4f66no07
```

Example Response

Status code: 200

Success.

```
{
  "error_log_list": [ {
    "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
    "time": "2022-07-17T07:34:33",
    "level": "ERROR",
```

```
"content" : "[MY013508] [Repl] do failed: 1"
} ]
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.8.3 Querying Database Slow Logs

Function

This API is used to query database slow logs. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Slow Query Logs](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/instances/{instance_id}/slowlog?offset={offset}&limit={limit}&level={level}&start_date={start_date}&end_date={end_date}&node_id={node_id}
- Example
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/c3ec2c6148ad4d71b1a8411a62df0d3cin07/slowlog?offset=0&limit=100&level=ALL&start_date=2018-08-06T10:41:14+0800&end_date=2018-08-07T10:41:14+0800&node_id=cc07c60e94ec4575989840e648fb4f66no07
 - Parameter description

Table 5-177 Parameter description

Name	Type	Man dator y	Description
project_id	String	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .

Name	Type	Mandatory	Description
instance_id	String	Yes	DB instance ID.
node_id	String	Yes	Instance node ID.
start_date	String	Yes	Start time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
end_date	String	Yes	End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Only error logs generated within the last month can be queried.
offset	Integer	No	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +1 piece of data. The default value is 0 , indicating that the query starts from the first piece of data. The value must be an integer and the minimum value is 0 .
limit	Integer	No	Number of records to be queried. The default value is 10 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .
type	String	No	Statement type. The default value All . If this parameter is left empty, all statement types are queried. Values: • ALL • INSERT • UPDATE • SELECT • DELETE • CREATE • DROP • ALTER

Request
None

Response

- Normal response

Table 5-178 Parameter description

Name	Type	Description
slow_log_list	Array of objects	Slow log information. For details, see Table 3.
long_query_time	String	Threshold of slow logs in seconds.
total_record	Integer	Total number of records.

Table 5-179 error_log_list parameter description

Name	Type	Description
node_id	String	Node ID.
time	String	Execution time.
count	String	Number of executions.
lock_time	String	Lock wait time.
rows_sent	String	Number of sent rows.
rows_examined	String	Number of scanned rows.
database	String	Database which slow logs belong to.
users	String	Account.
query_sample	String	Execution syntax.
type	String	Statement type.
start_time	String	Time in the UTC format.
client_ip	String	IP address.

- Example normal response

```
{  
  "slow_log_list":[
```



```
{
  "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
  "count": "1",
  "time": "1.04899 s",
  "lock_time": "0.00003 s",
  "rows_sent": "0",
  "rows_examined": "0",
  "database": "gaussdb-mysql",
  "users": "root",
  "query_sample": "INSERT INTO time_zone_name (Name, Time_zone_id)
VALUES (N, @time_zone_id);",
  "type": "INSERT",
  "start_time": "2121-03-25T10:55:16",
  "client_ip": "192.*.*.1"
},
{
  "long_query_time": " 10",
  "total_record": 15
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.8.4 Querying Database Slow Logs

Function

This API is used to query database slow logs. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Querying Slow Query Logs](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

GET /v3/{project_id}/instances/{instance_id}/slowlog

Table 5-180 URI 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 5-181 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 the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
end_date	Yes	String	End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 . Only error logs generated within the last month can be queried.
offset	No	Integer	Index offset. If offset is set to <i>N</i> , the resource query starts from the <i>N</i> +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.

Parameter	Mandatory	Type	Description
limit	No	Integer	Number of records to be queried. The default value is 100 . The value must be a positive integer. The minimum value is 1 and the maximum value is 100 .
type	No	String	Statement type. The default value All . If this parameter is left empty, all statement types are queried. Values: • ALL • INSERT • UPDATE • SELECT • DELETE • CREATE • DROP • ALTER
node_id	Yes	String	Node ID.

Request Parameters

Table 5-182 Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	No	String	User token.
X-Language	No	String	Language.

Response Parameters

Status code: 200

Table 5-183 Response body parameters

Parameter	Type	Description
slow_log_list	Array of MysqlSlowLogList objects	Error log details.

Parameter	Type	Description
long_query_time	String	Slow query log threshold.
total_record	Integer	Total number of records.

Table 5-184 MysqlSlowLogList

Parameter	Type	Description
node_id	String	Node ID.
count	String	Number of executions.
time	String	Execution time.
lock_time	String	Lock wait time.
rows_sent	String	Number of sent rows.
rows_examined	String	Number of scanned rows.
database	String	Database which slow logs belong to.
users	String	Account.
query_sample	String	Execution syntax.
type	String	Statement type.
start_time	String	Start time in the UTC format.
client_ip	String	IP address.

Status code: 400**Table 5-185** Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Status code: 500

Table 5-186 Response body parameters

Parameter	Type	Description
error_code	String	Error code.
error_msg	String	Error message.

Example Request

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07/slowlog?offset=0&limit=1&start_date=2022-07-10T00:00:00+0800&end_date=2022-07-19T00:00:00+0800&node_id=cc07c60e94ec4575989840e648fb4f66no07&type=INSERT
```

Example Response

Status code: 200

Success.

```
{
  "slow_log_list": [ {
    "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
    "count": 1,
    "time": "1.04899 s",
    "lock_time": "0.00003 s",
    "rows_sent": 0,
    "rows_examined": 0,
    "database": "gaussdb-mysql",
    "users": "root",
    "query_sample": "INSERT INTO time_zone_name (Name, Time_zone_id) VALUES (N @time_zone_id);",
    "type": "INSERT",
    "start_time": "2121-03-25T10:55:16.000Z",
    "client_ip": "192.*.*.1"
  } ],
  "long_query_time": 10,
  "total_record": 15
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

5.9 Task Information Queries

5.9.1 Obtaining Information About a Task

Function

This API is used to obtain task information from the task center. Before calling this API:

NOTICE

This historical API may not be maintained in the future. You are advised to switch workloads to the new API ([Obtaining Information About a Task with a Specified ID](#)).

- Learn how to [authorize and authenticate](#) it.
- Obtain the required [region and endpoint](#).

URI

- URI format
GET https://{endpoint}/mysql/v3/{project_id}/jobs?id={id}
- Example
GET https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/jobs?id=a9767ede-fe0f-4888-9003-e843a4c90514
- Parameter description

Table 5-187 Parameter description

Name	Mandatory	Description
project_id	Yes	Project ID of a tenant in a region. To obtain this value, see Obtaining a Project ID .
id	Yes	Task ID.

Request

None

Response

- Normal response

Table 5-188 Parameter description

Name	Type	Description
job	Object	Task information. For details, see Table 5-189 .

Table 5-189 job field data structure description

Name	Type	Description
id	String	Task ID.
name	String	Task name.
status	String	Task execution status. Values: • Running: The task is being executed. • Completed: The task is successfully executed. • Failed: The task failed to be executed.
created	String	Creation time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
ended	String	End time in the "yyyy-mm-ddThh:mm:ssZ" format. T is the separator between the calendar and the hourly notation of time. Z indicates the time zone offset. For example, in the Beijing time zone, the time zone offset is shown as +0800 .
process	String	Task execution progress.
instance	Object	DB instance on which the task is executed. For details, see Table 5-190 .
entities	Object	Displayed information varies depending on tasks. For details, see Table 5-191 .
fail_reason	String	Task failure information.

Table 5-190 instances field data structure description

Name	Type	Description
id	String	DB instance ID.
name	String	DB instance name.

Table 5-191 entities field data structure description

Name	Type	Description
instance	Object	DB instance queried in the task. For details, see Table 5-192 .
resource_ids	List<String>	Resource ID involved in a task.

Table 5-192 entities.instance field data structure description

Name	Type	Description
endpoint	String	DB instance connection address.
type	String	DB instance type.
datastore	Object	DB information. For details, see Table 5-193 .

Table 5-193 datastore field data structure description

Name	Type	Description
type	String	DB engine.
version	String	DB version.

Table 5-194 entities field data structure description (binding or unbinding an EIP)

Name	Type	Description
public_ip	String	EIP used in the task.

 NOTE

In the response example, some tasks in the task center are used as examples.

- Example normal response

```
{
  "job": {
    "id": "31b8ae23-c687-4d80-b7b4-42a66c9bb886",
    "name": " RestartGaussDBInstance",
    "status": "Completed",
    "created": "2018-08-06T10:41:14+0000",
    "ended": "2018-08-06T16:41:14+0000",
    "process": "",
    "instance": {
      "id": "a48e43ff268f4c0e879652d65e63d0fbin01",
      "name": "DO-NOT-TOUCH-mgr2-gaussdb"
    },
    "entities": {}
  }
}
```

Status Code

For details, see [Status Codes](#).

Error Code

For details, see [Error Codes](#).

6 Permissions Policies and Supported Actions

6.1 Permissions Policies and Supported Actions

This chapter describes fine-grained permissions management for your TaurusDB. If your account does not need individual IAM users, then you may skip over this chapter.

By default, new IAM users do not have permissions assigned. You need to add a user to one or more groups, and attach permissions policies or roles to these groups. Users inherit permissions from the groups to which they are added and can perform specified operations on cloud services based on the permissions.

You can grant users permissions by using [Roles](#) and [Policies](#). Roles are a type of coarse-grained authorization mechanism that defines permissions related to user responsibilities. Policies define API-based permissions for operations on specific resources under certain conditions, allowing for more fine-grained, secure access control of cloud resources.

NOTE

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 GaussDB instances using an API, the user must have been granted permissions that allow the **gaussdb:instance:list** action.

Supported Actions

TaurusDB provides system-defined policies that can be directly used in IAM. You can also create custom policies to supplement system-defined policies for more refined access control. Operations supported by policies are specific to APIs. The following are common concepts related to policies:

- **Permission:** A statement in a policy that allows or denies certain operations.
- **APIs:** REST APIs that can be called in a custom policy.
- **Actions:** Added to a custom policy to control permissions for specific operations.
- **Related actions:** Actions on which a specific action depends to take effect. When assigning permissions for the action to a user, you also need to assign permissions for the dependent actions.
- **IAM projects or enterprise projects:** Type of projects in which policies can be used to grant permissions. A policy can be applied to IAM projects, enterprise projects, or both. Policies that contain actions supporting both IAM and enterprise projects can be assigned to user groups and take effect in both IAM and Enterprise Management. Policies that only contain actions supporting IAM projects can be assigned to user groups and only take effect for IAM. Such policies will not take effect if they are assigned to user groups in Enterprise Management. For details about the differences between IAM and enterprise projects, see [Differences Between IAM and Enterprise Management](#).

 NOTE

The check mark (√) indicates that an action takes effect. The cross mark (x) indicates that an action does not take effect.

6.2 TaurusDB Actions

The following table lists the actions supported by TaurusDB.

Table 6-1 Common query actions

Permission	API	Action	IAM Project	Enterprise Project
Querying the DB engine version	GET /v3/{project_id}/datastores/{database_name}	gaussdb:instance:list	√	√
Querying database specifications	GET /v3/{project_id}/flavors/{database_name}	gaussdb:instance:list	√	√

Table 6-2 Instance management actions

Permission	API	Action	IAM Project	Enterprise Project
Creating a DB instance	POST /v3/{project_id}/instances	gaussdb:instance:create	√	√
Querying DB instances	GET /v3/{project_id}/instances	gaussdb:instance:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Rebooting a DB instance	POST /v3/{project_id}/instances/{instance_id}/restart	gaussdb:instance:restart	√	√
Deleting or unsubscribing from a DB instance	DELETE /v3/{project_id}/instances/{instance_id}	gaussdb:instance:delete	√	√
Querying details of a DB instance	GET /v3/{project_id}/instances/{instance_id}	gaussdb:instance:list	√	√
Querying details of DB instances in batches	GET /v3/{project_id}/instances/details	gaussdb:instance:list	√	√
Creating a read replica	POST /v3/{project_id}/instances/{instance_id}/nodes/enlarge	gaussdb:instance:addNodes	√	√
Deleting or unsubscribing from a read replica	DELETE /v3/{project_id}/instances/{instance_id}/nodes/{node_id}	gaussdb:instance:deleteNodes	√	√
Scaling up storage of a yearly/monthly DB instance	POST /v3/{project_id}/instances/{instance_id}/volume/extend	gaussdb:instance:modifyStorageSize	√	√
Changing a DB instance name	PUT /v3/{project_id}/instances/{instance_id}/name	gaussdb:instance:rename	√	√
Resetting a database password	POST /v3/{project_id}/instances/{instance_id}/password	gaussdb:instance:modifyPassword	√	√
Changing DB instance specifications	POST /v3/{project_id}/instances/{instance_id}/action	gaussdb:instance:modifySpec	√	√

Permission	API	Action	IAM Project	Enterprise Project
Querying dedicated resource pools	GET /v3/{project_id}/dedicated-resources	gaussdb:instance:list	√	√
Querying dedicated resources	GET /v3/{project_id}/dedicated-resource/{dedicated_resource_id}	gaussdb:instance:list	√	√
Configuring the Monitoring By Seconds function	PUT /v3/{project_id}/instances/{instance_id}/monitor-policy	gaussdb:instance:modify gaussdb:instance:modifyMonitorPolicy	√	√
Querying the configuration of Monitoring by Seconds	GET /v3/{project_id}/instances/{instance_id}/monitor-policy	gaussdb:instance:list	√	√
Rebooting a node	POST /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/restart	gaussdb:instance:restart	√	√
Upgrading the kernel version of a DB instance	POST /v3/{project_id}/instances/{instance_id}/db-upgrade	gaussdb:instance:upgrade	√	√
Enabling or Disabling SSL	PUT /v3/{project_id}/instances/{instance_id}/ssl-option	gaussdb:instance:modifySSL	√	√
Binding an EIP	PUT /v3/{project_id}/instances/{instance_id}/public-ips/bind	gaussdb:instance:bindPublicIp	√	√
Unbinding an EIP	PUT /v3/{project_id}/instances/{instance_id}/public-ips/unbind	gaussdb:instance:unbindPublicIp	√	√

Permission	API	Action	IAM Project	Enterprise Project
Promoting a read replica to primary	PUT /v3/{project_id}/instances/{instance_id}/switchover	gaussdb:instance:switchover	√	√
Changing a maintenance window	PUT /v3/{project_id}/instances/{instance_id}/ops-window	gaussdb:instance:modifyMaintenanceWindow	√	√
Changing a security group	PUT /v3/{project_id}/instances/{instance_id}/security-group	gaussdb:instance:modifySecurityGroup	√	√
Changing a private IP address	PUT /v3/{project_id}/instances/{instance_id}/internal-ip	gaussdb:instance:modifyIp	√	√
Changing a database port	PUT /v3/{project_id}/instances/{instance_id}/port	gaussdb:instance:modifyPort	√	√
Changing a DB instance description	PUT /v3/{project_id}/instances/{instance_id}/alias	gaussdb:instance:modify	√	√
Applying for a private domain name	POST /v3/{project_id}/instances/{instance_id}/dns	gaussdb:instance:createDns	√	√
Changing a private domain name	PUT /v3/{project_id}/instances/{instance_id}/dns	gaussdb:instance:modifyDns	√	√

Table 6-3 Backup management actions

Permission	API	Action	IAM Project	Enterprise Project
Modifying an automated backup policy	PUT /v3/{project_id}/instances/{instance_id}/backups/policy/update	gaussdb:instance:modifyBackupPolicy	√	√

Permission	API	Action	IAM Project	Enterprise Project
Creating a manual backup	POST /v3/{project_id}/backups/create	gaussdb:backup:create	√	√
Querying backups	GET /v3/{project_id}/backups	gaussdb:backup:list	√	√
Querying an automated backup policy	GET /v3/{project_id}/instances/{instance_id}/backups/policy	gaussdb:backup:list	√	√
Deleting a manual backup	DELETE /v3/{project_id}/backups/{backup_id}	gaussdb:backup:delete	√	√
Restoring data to the original instance or an existing instance	POST /v3/{project_id}/instances/restore	gaussdb:instance:restoreInPlace	√	√
Querying the restoration time range	GET /v3/{project_id}/instances/{instance_id}/restore-time	gaussdb:backup:list	√	√
Enabling or disabling encrypted backup	POST /v3/{project_id}/instances/{instance_id}/backups/encryption	gaussdb:backup:encrypt	√	√
Checking whether encrypted backup is enabled	GET /v3/{project_id}/instances/{instance_id}/backups/encryption	gaussdb:backup:list	√	√

Table 6-4 Parameter template management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying parameter templates	GET /v3/{project_id}/configurations	gaussdb:parameter:list	√	√
Creating a parameter template	POST /v3/{project_id}/configurations	gaussdb:parameter:create	√	√

Permission	API	Action	IAM Project	Enterprise Project
Deleting a parameter template	DELETE /v3/{project_id}/configurations/{configuration_id}	gaussdb:parameter:delete	√	√
Obtaining details about a parameter template	GET /v3/{project_id}/configurations/{configuration_id}	gaussdb:parameter:list	√	√
Modifying parameters in a parameter template	PUT /v3/{project_id}/configurations/{configuration_id}	gaussdb:parameter:modify	√	√
Applying a parameter template	PUT /v3/{project_id}/configurations/{configuration_id}/apply	gaussdb:parameter:apply	√	√

Table 6-5 Quota management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying the instance quotas of a tenant	GET /v3/{project_id}/project-quotas	gaussdb:instance:list	√	√
Querying enterprise project resource quotas of a tenant	GET /v3/{project_id}/quotas	gaussdb:instance:list	√	√
Configuring enterprise project resource quotas for a tenant	POST /v3/{project_id}/quotas	gaussdb:quota:modify	√	√
Modifying enterprise project resource quotas of a tenant	PUT /v3/{project_id}/quotas	gaussdb:quota:modify	√	√

Table 6-6 Database proxy actions

Permission	API	Action	IAM Project	Enterprise Project
Creating a proxy instance	POST /v3/{project_id}/instances/{instance_id}/proxy	gaussdb:proxy:create	√	√
Deleting a proxy instance	DELETE /v3/{project_id}/instances/{instance_id}/proxy	gaussdb:proxy:delete	√	√
Querying proxy instances	GET /v3/{project_id}/instances/{instance_id}/proxies	gaussdb:proxy:list	√	√
Querying proxy instance specifications	GET /v3/{project_id}/instances/{instance_id}/proxy/flavors	gaussdb:proxy:list	√	√
Adding proxy nodes	POST /v3/{project_id}/instances/{instance_id}/proxy/enlarge	gaussdb:proxy:addNodes	√	√
Changing specifications of a proxy instance	PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/flavor	gaussdb:proxy:modifySpec	√	√
Assigning read weights	PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/weight	gaussdb:proxy:modifyWeight	√	√
Enabling or disabling transaction splitting	POST /v3/{project_id}/instances/{instance_id}/proxy/transaction-split	gaussdb:proxy:modifyTransactionSplit	√	√
Changing session consistency of a proxy instance	PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/session-consistence	gaussdb:proxy:modifyConsistency	√	√
Changing the connection pool type of a proxy instance	PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/connection-pool-type	gaussdb:proxy:switchConnectionPoolType	√	√

Permission	API	Action	IAM Project	Enterprise Project
Changing the port of a proxy instance	POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/port	gaussdb:proxy:modifyPort	√	√
Changing routing policy of a proxy instance	PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/route-mode	gaussdb:proxy:modifyRouteMode	√	√

Table 6-7 Log management actions

Permission	API	Action	IAM Project	Enterprise Project
Enabling or disabling SQL Explorer	POST /v3/{project_id}/instance/{instance_id}/audit-log/switch	gaussdb:instance:modifyTraceSQLPolicy	√	√
Querying whether SQL Explorer is enabled	GET /v3/{project_id}/instance/{instance_id}/audit-log/switch-status	gaussdb:instance:list	√	√
Querying slow query logs	POST /v3.1/{project_id}/instances/{instance_id}/slow-logs	gaussdb:log:list	√	√
Querying error logs	POST /v3.1/{project_id}/instances/{instance_id}/error-logs	gaussdb:log:list	√	√

Table 6-8 Tag management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying resource tags	GET /v3/{project_id}/instances/{instance_id}/tags	gaussdb:tag:list	√	√
Querying project tags	GET /v3/{project_id}/tags	gaussdb:tag:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Adding or deleting tags in batches	POST /v3/{project_id}/instances/{instance_id}/tags/action	gaussdb:instance:dealTag	√	√

Table 6-9 Database user management actions

Permission	API	Action	IAM Project	Enterprise Project
Creating a database account	POST /v3/{project_id}/instances/{instance_id}/db-users	gaussdb:user:create	√	√
Querying database users	GET /v3/{project_id}/instances/{instance_id}/db-users	gaussdb:user:list	√	√
Deleting a database user	DELETE /v3/{project_id}/instances/{instance_id}/db-users	gaussdb:user:delete	√	√
Modifying the description of a database user	PUT /v3/{project_id}/instances/{instance_id}/db-users/comment	gaussdb:database:modify	√	√
Changing the password of a database user	PUT /v3/{project_id}/instances/{instance_id}/db-users/password	gaussdb:user:modify	√	√
Authorizing permissions to a database user	POST /v3/{project_id}/instances/{instance_id}/db-users/privilege	gaussdb:user:grantPrivilege	√	√
Deleting permissions of a database user	DELETE /v3/{project_id}/instances/{instance_id}/db-users/privilege	gaussdb:user:revokePrivilege	√	√

Table 6-10 Database management actions

Permission	API	Action	IAM Project	Enterprise Project
Querying available database character sets	GET /v3/{project_id}/instances/{instance_id}/databases/charsets	gaussdb:database:list	√	√
Creating a database	POST /v3/{project_id}/instances/{instance_id}/databases	gaussdb:database:create	√	√
Querying databases	GET /v3/{project_id}/instances/{instance_id}/databases	gaussdb:database:list	√	√
Deleting a database	DELETE /v3/{project_id}/instances/{instance_id}/databases	gaussdb:database:delete	√	√
Modifying the description of a database	PUT /v3/{project_id}/instances/{instance_id}/databases/comment	gaussdb:user:modify	√	√

Table 6-11 Traffic management actions

Permission	API	Action	IAM Project	Enterprise Project
Enabling or disabling SQL throttling	POST /v3/{project_id}/instances/{instance_id}/sql-filter/switch	gaussdb:parameter:modify	√	√
Querying whether SQL throttling is enabled	GET /v3/{project_id}/instances/{instance_id}/sql-filter/switch	gaussdb:parameter:list	√	√
Configuring SQL throttling rules	PUT /v3/{project_id}/instances/{instance_id}/sql-filter/rules	gaussdb:parameter:modify	√	√
Querying SQL throttling rules	GET /v3/{project_id}/instances/{instance_id}/sql-filter/rules	gaussdb:parameter:list	√	√

Permission	API	Action	IAM Project	Enterprise Project
Deleting SQL throttling rules	DELETE /v3/{project_id}/instances/{instance_id}/sql-filter/rules	gaussdb:parameter:modify	√	√
Querying user session threads on a node	GET /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/processes	gaussdb:instance:listProcesses	√	√
Terminating user session threads on a node	DELETE /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/processes	gaussdb:instance:deleteProcesses	√	√

Table 6-12 Task center actions

Permission	API	Action	IAM Project	Enterprise Project
Obtaining information about a task with a specified ID	GET /v3/{project_id}/jobs	gaussdb:instance:list	√	√
Obtaining instant tasks	GET /v3/{project_id}/immediate-jobs	gaussdb:instance:list	√	√
Obtaining scheduled tasks	GET /v3/{project_id}/scheduled-jobs	gaussdb:instance:list	√	√
Canceling a scheduled task	DELETE /v3/{project_id}/scheduled-jobs	gaussdb:instance:delete	√	√
Deleting a task record	DELETE /v3/{project_id}/jobs/{job_id}	gaussdb:instance:delete	√	√

A Appendix

A.1 Abnormal Request Results

- Abnormal response description

Table A-1 Abnormal response description

Name	Type	Description
error_code	String	Returned error code when a task submission exception occurs. For details, see Error Codes .
error_msg	String	Returned error description when a task submission exception occurs.

- Example response

```
{
  "error_code": "DBS.280234",
  "error_msg": "Invalid DB instance name."
}
```

A.2 Status Codes

The following table describes status codes.

Table A-2 Status codes

Status Code	Message	Description
100	Continue	The client should continue with its request. This interim response is used to inform the client that the initial part of the request has been received and has not yet been rejected by the server.
101	Switching Protocols	The protocol should be switched. The protocol can only be switched to a more advanced protocol. For example, the current HTTP protocol is switched to a later version.
200	OK	Request succeeded.
201	Created	The request for creating a resource or task has been fulfilled.
202	Accepted	The request has been accepted, but the processing has not been completed.
203	Non-Authoritative Information	Unauthorized information. The request is successful.
204	NoContent	The server has successfully processed the request, but has not returned any content. The status code is returned in response to an HTTP OPTIONS request.
205	Reset Content	The server has fulfilled the request, but the requester is required to reset the content.
206	Partial Content	The server has processed certain GET requests.
300	Multiple Choices	There are multiple options for the location of the requested resource. The response contains a list of resource characteristics and addresses from which the user or user agent (such as a browser) can choose the most appropriate one.
301	Moved Permanently	The requested resource has been assigned a new permanent URI, and the new URI is contained in the response.
302	Found	The requested resource was temporarily moved.
303	See Other	The response to the request can be found under a different URI and should be retrieved using a GET or POST method.

Status Code	Message	Description
304	Not Modified	The requested resource has not been modified. In such a case, there is no need to retransmit the resource since the client still has a previously-downloaded copy.
305	Use Proxy	The requested resource must be accessed through a proxy.
306	Unused	The HTTP status code is no longer used.
400	BadRequest	Invalid request. The client should not repeat the request without modifications.
401	Unauthorized	The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.
402	Payment Required	This status code is reserved for future use.
403	Forbidden	The server understood the request, but is refusing to fulfill it. The client should not repeat the request without modifications.
404	NotFound	The requested resource cannot be found. The client should not repeat the request without modifications.
405	MethodNotAllowed	The method specified in the request is not supported for the requested resource. The client should not repeat the request without modifications.
406	Not Acceptable	The server cannot fulfill the request according to the content characteristics of the request.
407	Proxy Authentication Required	This status code is similar to 401, but indicates that the client must first authenticate itself with the proxy.
408	Request Time-out	The server timed out waiting for the request. The client may repeat the request without modifications at any later time.

Status Code	Message	Description
409	Conflict	The request could not be processed due to a conflict. This status code indicates that the resource that the client attempts to create already exists, or the request fails to be processed because of the update of the conflict request.
410	Gone	The requested resource is no longer available. The requested resource has been deleted permanently.
411	Length Required	The server refuses to process the request without a defined Content-Length.
412	Precondition Failed	The server does not meet one of the preconditions that the requester puts on the request.
413	Request Entity Too Large	The request is larger than 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.
414	Request-URI Too Large	The URI provided was too long for the server to process.
415	Unsupported Media Type	The server is unable to process the media format in the request.
416	Requested Range Not Satisfiable	The requested range is invalid.
417	Expectation Failed	The server fails to meet the requirements of the Expect request-header field.
422	UnprocessableEntity	The request is well-formed but is unable to be processed due to semantic errors.
429	TooManyRequests	The client has sent more requests than its rate limit is allowed within a given amount of time, or the server has received more requests than it is able to process within a given amount of time. In this case, it is advisable for the client to re-initiate requests after the time specified in the Retry-After header of the response expires.
500	InternalServerError	The server is able to receive the request but it could not understand the request.

Status Code	Message	Description
501	Not Implemented	The server does not support the requested function.
502	Bad Gateway	The server acting as a gateway or proxy receives an invalid response from a remote server.
503	ServiceUnavailable	The requested service is invalid. The client should not repeat the request without modifications.
504	ServerTimeout	The request cannot be fulfilled within a given time. The response will reach the client only if the request carries a timeout parameter.
505	HTTP Version not supported	The server does not support the HTTP protocol version used in the request.

A.3 Error Codes

If an error code starting with **APIGW** is returned after you call an API, rectify the fault by referring to the instructions provided in [Error Codes](#).

The following table describes error codes.

Status Code	Error Code	Error Message	Description	Troubleshooting
500	DBS.05000000	server error.	Server error.	Contact customer service.
400	DBS.05000001	The kernel version is too early.	Proxy instances cannot be created due to an early kernel version.	Upgrade the kernel version.
400	DBS.05000006	The username and password must be different.	The username and password must be different.	Enter a strong password.
400	DBS.05000007	The password cannot be the username spelled backwards.	The password cannot be the username spelled backwards.	Enter a strong password.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000008	The current version is the latest. No update is available.	The current version is the latest. No updates are available.	Select a version later than the current version.
400	DBS.05000009	The truncate_lsn value exceeds the threshold. Change the value during off-peak hours or contact technical support.	The value of truncate_lsn exceeds the threshold. Change the value during off-peak hours or contact technical support.	The value of truncate_lsn exceeds the threshold. Change the value during off-peak hours or contact technical support.
400	DBS.05000010	The write priority of proxy nodes must be unique.	The write priority of proxy nodes must be unique.	Reset the write priority.
400	DBS.05000011	The value must be a positive integer and less than the number of primary nodes.	The value must be a positive integer and less than the number of primary nodes.	Reset the value.
400	DBS.05000012	Please contact Huawei cloud customer service to upgrade.	Contact Huawei Cloud customer service to perform the upgrade.	Contact customer service to perform the upgrade.
400	DBS.05000014	Dedicated edition cannot be changed to general-purpose edition.	Dedicated edition cannot be changed to general-purpose edition.	Do not change dedicated edition to general-purpose edition.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000015	General-purpose edition is not supported.	General-purpose edition is not supported.	Do not choose general-purpose edition.
400	DBS.05000018	Request parameter list is empty.	The request parameter list is empty.	Check the parameter list.
400	DBS.05000019	DBA Assistant is not supported.	DBA Assistant is not supported.	Contact customer service to enable DBA Assistant.
400	DBS.05000020	No more ip addresses are available, need \$ {ipNumNeed} ,left \$ {ipNumLeft}.	Insufficient IP addresses in the subnet. Required IP addresses: \$ {ipNumNeed}. Remaining IP addresses: \$ {ipNumLeft}.	Select another subnet to create an instance.
400	DBS.05000021	dnsName has already exist.	The private domain name already exists.	Change the private domain name.
400	DBS.05000022	InstanceId do not match proxy.	The proxy instance does not belong to the DB instance.	Change the proxy instance.
400	DBS.05000023	The operation not supported. Contact the administrator please.	This operation is not supported. Contact customer service.	Contact customer service.
400	DBS.05000024	This operation cannot be performed because there are large transactions in the database.	There are large transactions in the database.	Contact customer service.
400	DBS.05000025	Failed to lock the resource package.	Failed to lock the resource package.	Contact customer service.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000026	Resource package already exists.	The resource package already exists.	Contact customer service.
400	DBS.05000027	If read replicas can be automatically added or deleted during the auto scaling policy, you cannot create or delete proxy instances.	If read replicas can be automatically added or deleted during the auto scaling policy, you cannot create or delete proxy instances.	Do not create or delete proxy instances.
400	DBS.05000028	You do not have operation permissions \$ {agencyName}. Check account permissions on IAM.	You do not have operation permission \$ {agencyName}. Check account permissions on IAM.	Check account permissions on IAM.
400	DBS.05000029	Encrypted backup and cross-region backup cannot be both enabled.	Cross-region and encrypted backup cannot be both enabled.	Disable encrypted backup first.
400	DBS.05000030	Encrypted backup and cross-region backup cannot be both enabled.	Encrypted backup and cross-region backup cannot be both enabled.	Disable cross-region backup first.
400	DBS.05000031	The current KMS algorithm does not support encrypted backup.	The current KMS algorithm does not support encrypted backup.	Select the SM4 or AES algorithm.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.0500003 2	Proxy not support this port.	The proxy instance does not support this port. Enter a correct port by referring to the official document.	Enter a correct port by referring to the official document.
400	DBS.0500003 3	Proxy dns duplicate, please reset it.	The domain name of the proxy address already exists. Reset it.	Reset the domain name of the proxy address.
400	DBS.0500003 4	The kernel version of the new instance must be later than or equal to original instance, please reset it.	The kernel version of the new instance must be later than or equal to that of the original instance. Reset it.	Select a later kernel version.
400	DBS.0500003 5	Specifying complete kernel version is not supported, please reset it.	You do not have permissions to specify a complete 4-digit kernel version.	Contact customer service to enable the corresponding whitelist feature.
400	DBS.0500003 6	Invalid records. Enter a valid value.	Invalid records. Enter a valid value.	Enter a valid value.
400	DBS.0500003 7	Invalid database charset. Enter a valid charset from [{charsets}].	Invalid database character set. Enter a value within value range [{charsets}].	Correct the character set.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000038	The tag is not compliant. The tag must comply with the corresponding tag policy.	The tag is not compliant. The tag must comply with the tag policy.	Contact customer service.
400	DBS.05000042	Invalid databases. Enter a valid value.	Invalid database table. Reset it.	Check whether the database table name is correct.
400	DBS.05000043	Invalid last_table_info. Enter a valid value.	Invalid final database table. Reset it.	Check whether the final database table is correct.
400	DBS.05000044	Param error: [{parameter}].	Parameter error: [{parameter}].	Enter a correct parameter based on the error description.
400	DBS.05000045	Some databases name are repeated.	There are duplicate databases in the request.	Check whether there are duplicate databases in the request.
400	DBS.05000046	Some tables name are repeated.	There are duplicate tables in the request.	Check whether there are duplicate tables in the request.
400	DBS.05000047	Some databases name are not exists.	The source database is not found.	Check whether the source database is correct.
400	DBS.05000048	Some tables name are not exists.	The source database table is not found.	Check whether the source database table is correct.
400	DBS.05000049	Binlog meta data is not exist.	The Binlog metadata is not found.	Contact customer service.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000058	The non-extended-use specifications cannot be changed to extended-use specifications or the other way around.	The non-extended-use specifications cannot be changed to extended-use specifications or the other way around.	Select correct specifications.
400	DBS.05000062	Kernel parameter [{parameter}] must be [{paraValue}].	The kernel parameter [{parameter}] must be set to [{paraValue}].	Change the parameter value based on the error description.
400	DBS.05000068	Not support open TDE function.	TDE cannot be enabled.	Contact customer service to enable the corresponding whitelist feature.
400	DBS.05000069	The current kernel version does not support the TDE function.	The current kernel version does not support TDE.	Select a kernel version that supports TDE.
400	DBS.05000070	Invalid TDE encryption type. Only SM4 or AES256 is supported.	Invalid TDE encryption type. Only SM4 or AES-256 is supported.	Select a supported TDE encryption type.
400	DBS.05000071	Failed to update the TDE information.	Failed to update TDE information.	Contact customer service.
400	DBS.05000072	The current user is in the blacklist. They have no permissions to create DB instances.	The current user is in the blacklist. They have no permissions to create DB instances.	Contact customer service.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000073	The TDE instance cannot change to a kernel version that does not support TDE.	TDE is enabled for the instance, but the kernel version that instance will be changed to does not support TDE.	Select a kernel version that supports TDE.
400	DBS.05000074	You cannot specify AZs for read replicas.	You cannot specify AZs for read replicas.	Contact customer service to enable the corresponding whitelist feature.
400	DBS.05000076	Invalid proxy name.	Invalid proxy instance name.	Choose a valid proxy instance name.
400	DBS.05000077	Node deletion failed. Delete residual data on the node first.	Node deletion failed. Delete residual data on the node first.	Delete residual data on the node first.
400	DBS.05000078	New node weight is null. Please input it.	The weight of the new node is left blank. Enter a weight.	When adding a node, enter its weight.
400	DBS.05000079	Failed to verify the database synchronization configuration. Please check: [{parameter}].	Failed to verify the database synchronization configuration. Check [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000080	Failed to verify the table synchronization configuration. Please check: [{parameter}].	Failed to verify the table synchronization configuration. Check [{parameter}].	Check the error parameter based on the error description.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000081	Too many nodes.	Too many nodes.	Select the number of nodes allowed.
400	DBS.05000084	Read replicas are being created.	Read replicas are being created.	Disable the auto scaling policy after the read replicas are created.
400	DBS.05000085	The availability zone mode is not supported: [{parameter}].	The AZ type [{parameter}] is not supported.	Check the error parameter based on the error description.
400	DBS.05000086	Invalid AZ: [{parameter}].	Invalid AZ: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000087	Invalid dedicated resource id: [{parameter}].	Invalid dedicated resource ID: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000088	Invalid backup time: [{parameter}].	Invalid backup time: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000089	Invalid node quantity: [{parameter}].	Invalid number of nodes: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000090	Invalid security group: [{parameter}].	Invalid security group: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000091	Unsupported operation: [{parameter}].	Unsupported operation: [{parameter}].	Check the error parameter based on the error description.
400	DBS.05000092	General volume is not supported.	General-purpose storage is not supported.	Contact customer service to enable the corresponding whitelist feature.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000093	Readonly proxy with balance route not support route to master.	When load balancing is enabled for a read-only proxy instance, requests cannot be routed to the primary node.	Contact customer service.
400	DBS.05000094	The cv_lsn value exceeds the threshold. Change the value during off-peak hours or contact technical support.	The value of cv_lsn exceeds the threshold. Change the value during off-peak hours or contact technical support.	Contact customer service.
400	DBS.05000095	This operation cannot be performed because there are long transactions in the database.	There are long-running transactions in the database.	Contact customer service.
400	DBS.05000096	CPU usage is too high or tables number exceeds the upper limit not support re-diagnose.	If the CPU usage is too high or the number of tables exceeds the upper limit, re-diagnosis is not supported.	Contact customer service.
409	DBS.05000097	The same account name and host IP already exist.	The account name and host IP address already exist.	Select a different account name or host IP address.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000098	The current kernel version does not support level-1 backups.	The current kernel version does not support level-1 backups.	Select a proper kernel version.
400	DBS.05000099	The flavor of arm standard don't support to resize.	Specifications of the standard edition cannot be changed.	Select a correct specification code.
400	DBS.05000100	The failover priority cannot be set to 1 because the specifications of this node are different from those of the primary node.	The failover priority cannot be set to 1 because the specifications of this node are different from those of the primary node.	Set a different failover priority.
400	DBS.05000101	A manual switchover can be performed only for nodes with the failover priority set to 1.	A manual switchover can be performed only for nodes with the failover priority set to 1.	A manual switchover can be performed only for nodes with the failover priority set to 1.
400	DBS.05000102	A node with failover priority set to 1 is required.	A node with failover priority set to 1 is required.	When changing the failover priority, ensure that there is at least one node with the failover priority set to 1.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.05000103	Specifications of yearly/monthly instances cannot be upgraded and downgraded at the same time.	Specifications of yearly/monthly instances cannot be upgraded and downgraded at the same time.	Contact customer service.
400	DBS.200001	Parameter error.	Parameter error.	Check whether the transferred parameters or URLs are correct.
400	DBS.200004	Parameter error.	Parameter error.	Check whether the transferred parameters or URLs are correct.
400	DBS.200006	The request is null. Enter a request parameter.	The request is null. Enter a request parameter.	Check whether any mandatory request parameter is empty.
400	DBS.200021	Invalid DB instance name.	Invalid DB instance name.	Check whether the instance name is correct.
400	DBS.200023	Storage space is out of range.	The storage space is out of range.	Check whether the storage space exceeds the allowed range.
400	DBS.200024	Invalid region.	Invalid region.	Check whether the region name is correct and whether the region is available.
400	DBS.200025	Invalid AZ.	Invalid AZ.	Check whether the AZ name is correct and whether the AZ is available.
400	DBS.200026	Invalid storage type.	Invalid storage type.	Check whether the storage type is correct.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.200027	Storage space must be a multiple of 10.	Storage space must be a multiple of 10.	Check whether the storage space is a multiple of 10.
400	DBS.200040	The DB engine or version is not supported.	The DB engine or version is not supported.	Check whether the DB engine and version match and meet the requirements.
400	DBS.200041	Invalid database version.	Invalid database version.	Check whether the database version is supported.
400	DBS.200042	The DB engine does not exist.	The engine version is not found.	Check whether the DB engine is supported by TaurusDB.
400	DBS.200043	Invalid synchronize model.	Invalid HA synchronization mode.	Check whether the HA synchronization model meets the requirements.
400	DBS.200048	Invalid VPC ID.	Invalid VPC ID.	Check whether the VPC ID and name are correct and meet the requirements.
400	DBS.200049	Invalid subnet ID.	Invalid subnet ID.	Check whether the subnet ID and name are correct and meet the requirements.
400	DBS.200051	Invalid HA mode.	Invalid HA mode.	Check whether the HA mode meets the requirements.
400	DBS.200052	Invalid database root password.	Invalid database root password.	Check whether the username and password match and whether the password meets the requirements.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.200053	The selected specifications do not exist.	The selected specifications are not found.	Check whether the specifications are correct and available in the current AZ.
400	DBS.200054	Invalid specifications.	Invalid specifications.	Check whether the specifications are correct and available in the current AZ.
400	DBS.200056	The maximum number of nodes has been reached.	There are too many nodes.	Check whether the number of instance nodes reaches the upper limit.
400	DBS.200063	Invalid cluster mode.	Invalid cluster mode.	Check whether the cluster mode is valid.
400	DBS.200086	This operation is not allowed by the DB instance status.	This operation is not allowed by the DB instance status.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.200087	The number of tags added for the DB instance has reached the quota.	The number of tags added for the DB instance has reached the quota.	Check whether the number of tags for the DB instance exceeds the upper limit.
400	DBS.200098	The tag already exists.	The tag already exists.	Check whether the tag exists.
400	DBS.200302	Storage space must be a multiple of 10.	Storage space must be a multiple of 10.	Check whether the storage space is a multiple of 10.
400	DBS.200306	The new storage space must be greater than or equal to the original storage space.	The new storage space must be at least the original storage space.	Check whether the storage space exceeds the upper limit.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.200461	The parameter value is out of range.	The parameter value is out of range.	Check whether the port is valid.
400	DBS.200504	Invalid database version.	Invalid database version.	Check whether the database version is valid.
400	DBS.200543	The job does not exist.	The task is not found.	Check whether the task ID is valid.
400	DBS.200823	The database does not exist.	The database is not found.	Check whether the database can be found.
400	DBS.200824	The database account does not exist.	The database account is not found.	Check whether the database account exists.
400	DBS.201014	This operation is not allowed by the DB instance status.	This operation is not allowed by the DB instance status.	Check whether the instance status or the ongoing operation on the instance conflicts with the request.
400	DBS.201101	Invalid backup cycle.	Invalid backup cycle.	Check whether the backup cycle meets the requirements.
400	DBS.201103	Invalid backup start time.	Invalid backup start time.	Check whether the start time meets the requirement.
400	DBS.201106	Invalid retention days.	The retention period of backups is invalid.	Check whether the backup retention period meets the requirements.
400	DBS.201203	The backup file does not exist.	The backup is not found.	Check whether the backup exists and matches the instance.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.201207	The DB engine or version is not supported.	The DB engine or version is not supported.	Check whether the DB engine is supported by TaurusDB.
400	DBS.201208	The operation is not allowed by the backup status.	The operation is not allowed by the backup status.	Check whether the status of the backup is Completed .
400	DBS.212002	Incorrect parameter group quota.	Incorrect parameter template quota.	Delete unnecessary parameter templates and create a new one.
400	DBS.212003	Operation not allowed.	The operation is not allowed.	Default parameter templates cannot be reset or deleted.
400	DBS.212004	Parameter group update error.	The parameter template fails to be updated.	Check whether the new parameter values are valid.
400	DBS.212005	The node does not belong to the group.	The node does not belong to the group.	Check whether the instance ID or node ID is correct.
400	DBS.212007	The DB engine does not exist.	The DB engine is not found.	Check whether the DB engine exists.
400	DBS.212008	The DB engine is not supported.	The DB engine is not supported.	Check whether the DB engine is supported by TaurusDB.
400	DBS.212009	Task processing failed.	The task fails to be processed.	Contact customer service.
400	DBS.212010	The parameter group is being applied.	The parameter template is being applied.	Perform the operation after the application is complete.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.212011	Application failed.	Failed to apply the parameter template.	Contact customer service.
400	DBS.212012	The parameter does not exist.	The parameter is not found.	Check whether the new parameter is valid.
400	DBS.212014	The node does not have a default parameter group.	The node does not have a default parameter template.	Check whether the node ID or parameter template ID is correct.
400	DBS.212015	Partial success.	Partial success.	Check whether the parameters to be modified are correct.
400	DBS.212016	Parameter update failed.	Parameter update failed.	Contact customer service.
400	DBS.212017	Invalid parameter.	Parameter error.	Check whether the parameter name is valid.
400	DBS.212025	Update failed.	Update failed.	Contact customer service.
400	DBS.212030	Parameter error.	Parameter error.	The parameter template name already exists.
400	DBS.212032	The parameter template has been applied.	The parameter template has been applied.	The parameter template has been applied and cannot be deleted.
400	DBS.212037	Parameters are incorrectly set.	Parameters are incorrectly configured.	Check whether the parameter values are valid or within the valid range.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.270024	Proxy instance does not exist.	The proxy instance is not found.	Check whether the tenant has the proxy instance, whether the input proxy instance ID is correct, and whether the proxy instance exists.
400	DBS.270025	Invalid weight.	Invalid weight.	Check whether the weight format and range are correct.
400	DBS.270026	Invalid proxy mode.	The proxy type is invalid.	Check whether the database proxy type is correct.
400	DBS.270027	Select a proxy instance.	No proxy instances are specified.	Check whether the proxy instance ID is null.
400	DBS.280001	Parameter error.	Parameter error.	Check whether the transferred parameters or URLs are correct and meet the requirements.
400	DBS.280127	Invalid backup description.	Invalid backup description.	Check whether the backup description is correct and meets the requirements.
400	DBS.280128	The database name does not exist.	The database name is not found.	Check whether the tenant has the DB instance, whether the DB instance name or ID is correct, and whether the DB instance exists.
400	DBS.280203	This is a weak password. Please enter a strong password.	This is a weak password. Enter a strong password.	The password is too weak. Change it to a strong one.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.280204	Invalid parameter.	Invalid parameter.	Check whether the parameter value is valid or within the valid range.
400	DBS.280214	The backup does not exist.	The backup is not found.	Check whether the backup retention period is correct.
400	DBS.280216	Invalid backup start time.	Invalid backup start time.	Check whether the backup start time meets the requirements and whether the requirements between the backup start time and end time are correct.
400	DBS.280235	Invalid database type.	Invalid database type.	Check whether the DB engine is correct.
400	DBS.280237	Datastore not specified.	Datastore is not specified.	Check whether the DB engine is supported by TaurusDB.
400	DBS.280238	The DB engine or version is not supported.	The DB engine or version is not supported.	Check whether the DB engine and version match and meet the requirements.
400	DBS.280239	Invalid specifications.	Invalid specifications.	Check whether the specification code is correct, whether the specifications exist in the current AZ, and whether the specifications are supported.
400	DBS.280241	Invalid storage type.	Invalid storage type.	Check whether the storage type is correct and meets the requirements.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.280242	Storage space is out of range.	The storage space is out of range.	Check whether the specified storage space is correct.
400	DBS.280246	Invalid database root password.	Invalid database root password.	Check whether the username and password match and whether the password meets the requirements.
400	DBS.280250	Invalid backup retention days.	Invalid backup retention days.	Check whether the backup data retention period is valid or within the valid range.
400	DBS.280251	Invalid backup cycle.	Invalid backup cycle.	Check whether the backup cycle is valid or within the valid range.
400	DBS.280253	Invalid backup start time.	Invalid backup start time.	Check whether the backup start time meets the requirements and whether the requirements between the backup start time and end time are correct.
400	DBS.280260	Invalid AZ mode.	Invalid AZ mode.	Check whether the AZ mode is valid.
400	DBS.280270	The parameter does not exist.	The parameter is not found.	Check whether the new parameter is valid.
400	DBS.280271	The parameter value is out of range.	The parameter value is out of range.	Check whether the parameter value is within the valid range.
400	DBS.280272	The tag key must be unique.	The tag key must be unique.	Check whether the new tag exists.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.280277	Invalid backup name.	Invalid backup name.	Check whether the backup name is correct and meets the requirements.
400	DBS.280285	Invalid AZ.	Invalid AZ.	Check whether the AZ name is correct and whether the AZ is available.
400	DBS.280288	Invalid FlavorRef.	Invalid specifications.	Check whether the specification ID is null or a null string.
400	DBS.280311	Invalid storage space size.	Invalid storage space.	Check whether the specified storage space is correct and meets the requirements.
400	DBS.280325	Invalid storage information.	Invalid storage information.	Check whether the storage space or type is valid.
400	DBS.280342	Invalid cluster mode.	Invalid instance mode.	Check whether the instance mode is correct and whether the instance mode matches the instance ID.
400	DBS.280364	Invalid database port.	Invalid database port.	Check whether the database port is available.
400	DBS.280402	Invalid HA mode.	Invalid HA mode.	Check whether the HA mode meets the requirements.
400	DBS.280404	Invalid DB instance ID or node ID format.	Invalid DB instance ID.	Check whether the instance ID is valid.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.280434	Invalid specification code.	Invalid specification code.	Check whether the specification code complies with the rules, whether the specifications exist, and whether the specifications are available.
400	DBS.280439	Invalid records. Enter a positive integer less than 100.	Invalid value. Enter a positive integer of no more than 100.	Check whether the number of queried records is within the valid range.
400	DBS.280448	The storage type is sold out.	The storage type is sold out.	Check whether the current storage type is available.
400	DBS.280449	Operation not allowed on frozen objects.	The operation is not allowed on frozen objects.	Check whether the instance is frozen and whether the current operation can be performed when the instance is frozen.
400	DBS.280450	The DB instance specifications are sold out.	The DB instance specifications are sold out.	Select another AZ or contact customer service.
400	DBS.280500	ELB must be enabled.	ELB must be enabled.	Enable ELB.
400	DBS.280505	CBC error: There are unprocessed orders.	CBC error: There are unprocessed orders.	Check whether the current order has been processed.
400	DBS.290000	Parameter error.	Parameter error.	Check whether the transferred parameters or URLs are correct and meet the requirements.

Status Code	Error Code	Error Message	Description	Troubleshooting
400	DBS.290001	Invalid parameter letter case.	Invalid parameter letter case.	Check whether the parameter letter case is correct and meets the requirements.
403	DBS.200010	The DB instance ID or user ID may be null, or the operation is not authorized.	The DB instance ID or user ID may be null, or the operation is not authorized.	Check whether the input parameters are correct, whether the instance exists, and whether the tenant performs unauthorized operations.
403	DBS.200044	Resource not found or permission denied.	Resources are not found or permissions are denied.	Check whether the input parameters are correct, whether the resource exists, and whether the tenant has the access permission.
403	DBS.200604	The DB instance ID or user ID may be null, or the operation is not authorized.	The DB instance ID or user ID may be null, or the operation is not authorized.	Check whether the input parameters are correct, whether the instance exists, and whether the tenant performs unauthorized operations.
403	DBS.200810	You are not allowed to create databases on read replicas.	You are not allowed to create databases on read replicas.	Create databases on the primary node.
403	DBS.200819	You are not allowed to delete database users on read replicas.	You are not allowed to delete database users on read replicas.	Database users cannot be deleted from read replicas.

Status Code	Error Code	Error Message	Description	Troubleshooting
403	DBS.201003	Resource not found or permission denied.	Resources are not found or permissions are denied.	Check whether the parameters are correctly configured, whether the access resources exist, and whether the tenant has the access permission.
403	DBS.280015	Resource not found or permission denied.	Resources are not found or permissions are denied.	Check whether the parameters are correctly configured, whether the access resources exist, and whether the tenant has the access permission.
403	DBS.280056	Invalid token.	Invalid token.	Check whether the instance belongs to the tenant and whether the token has been obtained again.
404	DBS.200002	The DB instance does not exist.	The DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.200008	The ECS information of the DB instance cannot be found.	The ECS information of the DB instance cannot be found.	Check whether the parameters are correctly configured and whether the instance status is normal.
404	DBS.200013	The original DB instance does not exist.	The original DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.

Status Code	Error Code	Error Message	Description	Troubleshooting
404	DBS.200045	The DB instance does not exist.	The DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.200050	The security group does not exist or does not belong to the VPC.	The security group is not found or does not belong to the VPC.	Check whether the security group ID is valid, whether the security group exists, and whether the private IP address for read of the node belongs to the security group.
404	DBS.200408	The DB instance does not exist.	The instance is not found or has been deleted.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.200470	The region or AZ does not exist.	The region or AZ is not found.	Check whether the region or AZ is correct.
404	DBS.200501	The subnet does not exist or does not belong to the VPC.	The subnet is not found or does not belong to the VPC.	Check whether the subnet ID and name exist and whether the subnet belongs to the VPC.
404	DBS.200503	The VPC does not exist or does not belong to the user.	The VPC is not found or does not belong to the user.	Check whether the tenant has the VPC.
404	DBS.200602	The DB instance does not exist.	The DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.201010	The backup information does not exist.	The backup information is not found.	Check whether the backup exists and matches the instance.

Status Code	Error Code	Error Message	Description	Troubleshooting
404	DBS.201028	The DB instance does not exist.	The instance is not found or has been deleted.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.212001	The parameter group does not exist.	The parameter template is not found.	Check whether the parameter template exists.
404	DBS.290002	The selected specifications do not exist.	The selected specifications are not found.	Check whether the specifications are correct and available in the current AZ.
404	DBS.290005	The DB instance does not exist.	The DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.290011	The DB instance does not exist.	The DB instance is not found.	Check whether the instance and its ID are correct and whether the instance exists.
404	DBS.290013	Resource not found.	Resources are not found.	Check whether the parameters are correct and whether the DB instance exists.
409	DBS.200011	Another operation is being performed on the DB instance or the DB instance is faulty.	Another operation is being performed on the DB instance or the DB instance is faulty.	Check the instance status or whether the ongoing operation on the instance conflicts with the request.

Status Code	Error Code	Error Message	Description	Troubleshooting
409	DBS.200019	Another operation is being performed on the DB instance or the DB instance is faulty.	Another operation is being performed on the DB instance or the DB instance is faulty.	Check the instance status or whether the ongoing operation on the instance conflicts with the request.
409	DBS.200022	The DB instance name already exists.	The DB instance name already exists.	Check whether the instance name exists.
409	DBS.200047	Another operation is being performed on the DB instance or the DB instance is faulty.	Another operation is being performed on the DB instance or the DB instance is faulty.	Check the instance status or whether the ongoing operation on the instance conflicts with the request.
409	DBS.200316	This operation cannot be performed because the DB instance status is Storage full.	This operation cannot be performed because the DB instance status is Storage full .	Adjust the storage space.
409	DBS.200826	The database name already exists.	The database name already exists.	Check whether the database name is valid.
409	DBS.200827	The database user already exists.	The database user already exists.	Check whether the database user is valid.
409	DBS.200828	You are not allowed to create a database built-in account.	You are not allowed to create a database built-in account.	Check whether the database user is valid.

Status Code	Error Code	Error Message	Description	Troubleshooting
409	DBS.201202	Another operation is being performed on the DB instance or the DB instance is faulty.	Another operation is being performed on the DB instance or the DB instance is faulty.	Check the instance status or whether the ongoing operation on the instance conflicts with the request.
409	DBS.201205	Backup is in progress, please wait.	Backup is in progress.	Try again after the backup is complete.
409	DBS.212006	Another operation is being performed on the DB instance or the DB instance is faulty.	Another operation is being performed on the DB instance or the DB instance is faulty.	Check the instance status or whether the ongoing operation on the instance conflicts with the request.
409	DBS.280406	Operation not allowed by the DB instance type or status.	The operation is not allowed by the DB instance type or status.	Check whether the instance type and instance status meet requirements.
413	DBS.200046	The number of DB instances has reached the quota.	The number of DB instances has reached the quota.	Contact the database administrator to adjust the quota.
413	DBS.290003	The number of DB instances has reached the quota.	The number of DB instances has reached the quota.	Contact the database administrator to adjust the quota.
422	DBS.212019	The parameter cannot be processed.	The parameter or object in the request cannot be identified.	Check whether the parameter is valid.
500	DBS.108000	Server failure.	Server failure.	Contact customer service.

Status Code	Error Code	Error Message	Description	Troubleshooting
500	DBS.108002	Server failure.	Server failure.	Contact customer service.
500	DBS.108005	Server failure.	Server failure.	Contact customer service.
500	DBS.200005	Server failure.	Server failure.	Contact customer service.
500	DBS.200208	Server failure.	Server failure.	Contact customer service.
500	DBS.200811	Failed to create the database.	Failed to create the database.	Check whether resources are insufficient and then contact customer service.
500	DBS.200821	Failed to modify database user permissions.	Failed to modify database user permissions.	This operation is not allowed in the current instance status. Try again later.
500	DBS.213002	Failed to process the request.	Failed to process the request.	Internal service error. Contact customer service.
500	DBS.213004	Failed to process the request.	Failed to process the request.	Internal service error. Contact customer service.
500	DBS.290006	Failed to process the request.	Failed to process the request.	Internal service error. Contact customer service.
500	DBS.290015	Failed to process the request.	Failed to process the request.	Contact customer service.

A.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. Two methods are available:

- [Obtaining the Project ID by Calling an API](#)
- [Obtain 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.

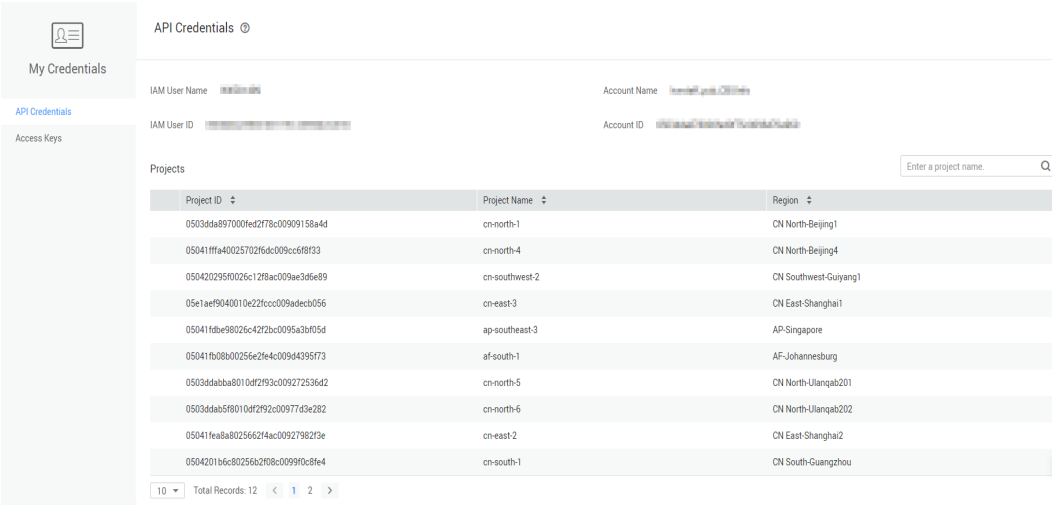
```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22cd05f897d6b99"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

Obtain a Project ID from the Console

- Step 1** Register yourself on the management console and log in to it.
- Step 2** Hover the mouse over the username in the upper right corner and select **My Credentials** from the drop-down list.

On the **API Credentials** page, view the project ID in the project list.

Figure A-1 Viewing project IDs



-----End

A.5 TaurusDB Metrics

Function Description

This section describes namespaces, descriptions, and dimensions of metrics to be reported to Cloud Eye. You can use APIs provided by Cloud Eye to retrieve metrics and alarm information generated for TaurusDB.

Namespace

SYS.GAUSSDB

Metrics

Table A-3 Metrics

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql001_cpu_util	CPU Usage	CPU usage of the monitored object	0–100%	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql002_mem_util	Memory Usage	Memory usage of the monitored object	0–100%	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql004_bytes_in	Network Input Throughput	Incoming traffic in bytes per second	≥ 0 bytes/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql005_bytes_out	Network Output Throughput	Outgoing traffic in bytes per second	≥ 0 bytes/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql006_conn_count	Total Connections	Total number of connections that connect to the MySQL server	≥ 0 connections	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql007_conn_active_count	Current Active Connections	Number of active connections	≥ 0 connections	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql008_qps	QPS	Query times of SQL statements (including DDL, DML, SHOW, SET statements and storage procedures) per second	≥ 0 times/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql009_tps	TPS	Execution times of submitted and rollback transactions per second	≥ 0 times/s	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql010_innodb_buffer_usage	Buffer Pool Usage	Ratio of used pages to total pages in the InnoDB buffer	0–100%	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql011_innodb_buffer_hit	Buffer Pool Hit Ratio	Ratio of read hits to read requests in the InnoDB buffer	0–100%	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql012_innodb_buffer_dirty	Buffer Pool Dirty Block Ratio	Ratio of dirty data to all data in the InnoDB buffer	0–100%	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql013_innodb_reads	InnoDB Read Throughput	Number of read bytes per second in the InnoDB buffer	≥ 0 bytes/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql014_innodb_writes	InnoDB Write Throughput	Number of write bytes per second in the InnoDB buffer	≥ 0 bytes/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql017_innodb_log_write_req_count	InnoDB Log Write Requests per Second	Number of InnoDB log write requests per second	≥ 0 requests/s	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql020_temp_tbl_count	Temporary Tables	Number of temporary tables automatically created on hard disks when MySQL statements are executed	≥ 0 tables	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql028_comdml_del_count	DELETE Statement s per Second	Number of DELETE statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql029_comdml_ins_count	INSERT Statement s per Second	Number of INSERT statements executed per second	≥ 0 statements/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql030_comdml_ins_sel_count	INSERT_SELECT Statement s per Second	Number of INSERT_SELECT statements executed per second	≥ 0 statements/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql031_comdml_rep_count	REPLACE Statement s per Second	Number of REPLACE statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql032_comdml_rep_sel_count	REPLACE_SELECT Statement s per Second	Number of REPLACE_SELECT statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql033_comdml_sel_count	SELECT Statement s per Second	Number of SELECT statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql034_comdml_upd_count	UPDATE Statement s per Second	Number of UPDATE statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql035_innodb_delete_row_count	Row Delete Frequency	Number of rows deleted from the InnoDB table per second	≥ 0 rows/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql036_innodb_inserts_row_count	Row Insert Frequency	Number of rows inserted into the InnoDB table per second	≥ 0 rows/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql037_innodb_read_row_count	Row Read Frequency	Number of rows read from the InnoDB table per second	≥ 0 rows/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql038_innodb_update_row_count	Row Update Frequency	Number of rows updated into the InnoDB table per second	≥ 0 rows/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql048_disk_used_size	Used Storage Space	Used storage space of the monitored object	0 GB–128 TB	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql072_conn_usage	Connection Usage	Percent of used MySQL connections to the total number of connections	0–100%	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql074_slow_queries	Slow Query Logs	Number of MySQL slow query logs generated per minute	≥ 0 queries/min	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql077_replication_delay	Replication Delay	Data replication latency between the primary node and read replicas	≥ 0 s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql104_dfv_write_delay	Storage Write Latency	Average latency of writing data to the storage layer in a specified period	≥ 0 ms	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql105_dfv_read_delay	Storage Read Latency	Average latency of reading data from the storage layer in a specified period	≥ 0 ms	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql106_innodb_row_lock_current_waits	InnoDB Row Locks	Number of row locks being waited by operations on the InnoDB table	≥ 0 locks	Monitored object: ECS Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql107_comdml_ins_and_ins_sel_count	INSERT and INSERT_SELECT Statement s per Second	Number of INSERT and INSERT_SELECT statements executed per second	≥ 0 statements/s	Monitored object: ECS Monitored instance type: TaurusDB instance
gaussdb_mysql108_com_commit_count	COMMIT Statement s per Second	Number of COMMIT statements executed per second	≥ 0 statements/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql109_com_rollback_count	ROLLBACK Statement s per Second	Number of ROLLBACK statements executed per second	≥ 0 statements/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql110_innodb_bufpool_reads	InnoDB Storage Layer Read Requests per Second	Number of times that InnoDB reads data from the storage layer per second	≥ 0 times/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql111_innodb_bufpool_read_requests	InnoDB Read Requests per Second	Number of InnoDB read requests per second	≥ 0 requests/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql114_innodb_bufpool_read_ahead	InnoDB Bufpool Read Ahead	Number of pages read into the InnoDB buffer pool by the read-ahead background thread	≥ 0 pages	Monitored object: database Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql115_innodb_bufpool_read_ahead_evicted	InnoDB Bufpool Read Ahead Evicted	Number of pages read into the InnoDB buffer pool by the read-ahead background thread that were subsequently evicted without having been accessed by queries	≥ 0 pages	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql116_innodb_bufpool_read_ahead_rnd	InnoDB Bufpool Read Ahead Rnd	Number of random read-aheads initiated by InnoDB	≥ 0 read-aheads	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql117_innodb_pages_read	InnoDB Pages Read	Number of pages read from the InnoDB buffer pool by operations on InnoDB tables	≥ 0 pages	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql118_innodb_pages_written	InnoDB Pages Written	Number of pages written by operations on InnoDB tables	≥ 0 pages	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql019_innodb_log_writes	InnoDB Log Writes	Number of physical writes to the InnoDB redo log file	≥ 0 writes	Monitored object: database Monitored instance type: TaurusDB instance

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql342_iostat_iops_write	I/O Write IOPS	Number of disk writes per second	≥ 0 operations/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql344_iostat_iops_read	I/O Read IOPS	Number of disk reads per second	≥ 0 operations/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql346_iostat_throughput_write	I/O Write Bandwidth	Disk write bandwidth per second	≥ 0 bytes/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql348_iostat_throughput_read	I/O Read Bandwidth	Disk read bandwidth per second	≥ 0 bytes/s	Monitored object: database Monitored instance type: TaurusDB instance
gaussdb_mysql119_disk_used_ratio	Disk Usage	Disk usage of the monitored object	0–100%	Monitored object: database Monitored instance type: TaurusDB instance 1 minute
gaussdb_mysql371_taurus_binlog_total_file_counts	Binlog Files	Number of TaurusDB binlog files	≥ 0	Monitored object: database Monitored instance type: TaurusDB instance 5 minutes

Metric	Name	Description	Value Range	Remarks
gaussdb_mysql378_create_temp_tbl_per_min	Temporary Tables Created per Minute	Number of temporary tables automatically created on disks per minute when TaurusDB statements are executed	≥ 0 tables/min	Monitored object: database Monitored instance type: TaurusDB instance 1 minute

Dimension

Key	Value
gaussdb_mysql_instance_id	TaurusDB instance ID.
gaussdb_mysql_node_id	Node ID of the TaurusDB instance.