

云数据库 TaurusDB

API 参考

文档版本 01
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1 使用前必读

概述

云数据库 TaurusDB是华为自研的最新一代企业级高扩展海量存储云原生数据库，完全兼容MySQL。基于华为最新一代DFV存储，采用计算存储分离架构，128TB的海量存储，数据0丢失，既拥有商业数据库的高可用和性能，又具备开源低成本效益。

📖 说明

DFV (Data Function Virtualization) 是一个与数据库垂直整合的高性能，高可靠的分布式存储系统。存储集群采取池化部署，可以有效提升存储使用效率。

您可以使用本文档提供API对数据库实例进行相关操作。支持的全部操作请参见[API概览](#)。

调用说明

云数据库 TaurusDB提供了REST (Representational State Transfer) 风格API，支持您通过HTTPS请求调用，调用方法请参见[如何调用API](#)。

终端节点

终端节点 (Endpoint) 即调用API的[请求地址](#)，不同服务不同区域的终端节点不同。TaurusDB服务提供的终端节点信息如[表1-1](#)所示。

表 1-1 TaurusDB 终端节点信息

产品名称	区域名称	区域	终端节点 (Endpoint)	协议类型
云数据库 TaurusDB	华北-北京四	cn-north-4	gaussdb.cn-north-4.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	华北-乌兰察布一	cn-north-9	gaussdb.cn-north-9.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	华东-上海一	cn-east-3	gaussdb.cn-east-3.myhuaweicloud.com	HTTPS

产品名称	区域名称	区域	终端节点 (Endpoint)	协议类型
云数据库 TaurusDB	华南-广州	cn-south-1	gaussdb.cn-south-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	华南-广州-友好用户环境	cn-south-4	gaussdb.cn-south-4.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	土耳其-伊斯坦布尔	tr-west-1	gaussdbformysql.tr-west-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	西南-贵阳一	cn-southwest-2	gaussdb.cn-southwest-2.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	亚太-新加坡	ap-southeast-3	gaussdb.ap-southeast-3.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	亚太-曼谷	ap-southeast-2	gaussdbformysql.ap-southeast-2.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	亚太-雅加达	ap-southeast-4	gaussdb.ap-southeast-4.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	华北-北京二	cn-north-2	gaussdb.cn-north-2.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	中国-香港	ap-southeast-1	gaussdbformysql.ap-southeast-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	拉美-圣保罗一	sa-brazil-1	gaussdb.sa-brazil-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	俄罗斯-莫斯科二	ru-northwest-2	gaussdb.ru-northwest-2.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	非洲-约翰内斯堡	af-south-1	gaussdb-mysql.af-south-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	乌兰察布-汽车一	cn-north-11	gaussdbformysql.cn-north-11.myhuaweicloud.com	HTTPS

产品名称	区域名称	区域	终端节点 (Endpoint)	协议类型
云数据库 TaurusDB	中东-利雅得	me-east-1	gaussdb-mysql.me-east-1.myhuaweicloud.com	HTTPS
云数据库 TaurusDB	华北-乌兰察布二零一	cn-north-5	gaussdbformysql.cn-north-5.myhuaweicloud.com	HTTPS

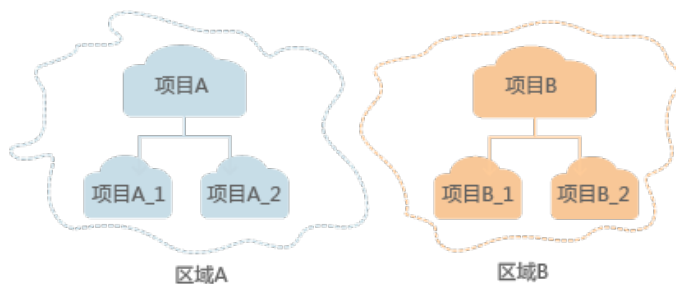
约束限制

- 暂不支持单机版实例调用API。
- 更详细的限制请参见具体API的说明。

基本概念

- 账号
用户注册时的账号，账号对其所拥有的资源及云服务具有完全的访问权限，可以重置用户密码、分配用户权限等。由于账号是付费主体，为了确保账号安全，建议您不要直接使用账号进行日常管理工作，而是创建用户并使用他们进行日常管理工作。
- 用户
由账号在IAM中创建的用户，是云服务的使用人员，具有身份凭证（密码和访问密钥）。
在[我的凭证](#)下，您可以查看账号ID和用户ID。通常在调用API的鉴权过程中，您需要用到账号、用户和密码等信息。
- 区域
指云资源所在的物理位置，同一区域内可用区间内网互通，不同区域间内网不互通。通过在不同地区创建云资源，可以将应用程序设计的更接近特定客户的要求，或满足不同地区的法律或其他要求。
- 可用区
一个可用区是一个或多个物理数据中心的集合，有独立的风火水电，AZ内逻辑上再将计算、网络、存储等资源划分成多个集群。一个Region中的多个AZ间通过高速光纤相连，以满足用户跨AZ构建高可用性系统的需求。
- 项目
区域默认对应一个项目，这个项目由系统预置，用来隔离物理区域间的资源（计算资源、存储资源和网络资源），以默认项目为单位进行授权，用户可以访问您账号中该区域的所有资源。如果您希望进行更加精细的权限控制，可以在区域默认的项目中创建子项目，并在子项目中购买资源，然后以子项目为单位进行授权，使得用户仅能访问特定子项目中资源，使得资源的权限控制更加精确。

图 1-1 项目隔离模型



同样在[我的凭证](#)下，您可以查看项目ID。

- 企业项目

企业项目是项目的升级版，针对企业不同项目间资源的分组和管理，是逻辑隔离。企业项目中可以包含多个区域的资源，且项目中的资源可以迁入迁出。

关于企业项目ID的获取及企业项目特性的详细信息，请参见《[企业管理服务用户指南](#)》。

2 API 概览

通过使用TaurusDB接口，您可以使用TaurusDB查询资源配额、设置资源配额、修改资源配额的功能。

类型	说明
查询数据库引擎的版本	获取指定数据库引擎对应的数据库版本信息。
查询数据库规格	获取指定数据库引擎版本对应的规格信息。
实例管理	包含TaurusDB实例的创建、重启、删除、实例信息修改等接口。
备份管理	包含TaurusDB备份的创建、设置、删除等接口。
参数模板管理	包含TaurusDB参数模板的创建、修改、复制、对比、删除等接口。
配额管理	包含TaurusDB配额的设置、修改等接口。
数据库代理	包含TaurusDB数据库代理的开启、扩容、规格变更、代理信息修改等接口。
日志管理	包含TaurusDB日志的开启、设置、关闭等接口。
标签管理	包含TaurusDB标签的添加、删除等接口。
数据库用户管理	包含TaurusDB数据库用户的创建、信息修改、授权、删除等接口。
数据库管理	包含TaurusDB数据库的创建、信息修改、删除等接口。
流量管理	包含TaurusDB SQL限流功能的开启、设置、删除等接口。
任务中心	包含TaurusDB任务中心任务的获取、取消、删除等接口。
智能诊断	包含获取指标异常的实例数和实例信息。
HTAP-标准版	包含HTAP标准版实例的创建、重启、数据同步、删除等接口。

类型	说明
多租特性	包含查询多租特性开关状态、开启或者关闭多租特性等接口。

3 如何调用 API

3.1 构造请求

本节介绍REST API请求的组成，并以调用IAM服务的[获取用户Token](#)说明如何调用API，该API获取用户的Token，Token可以用于调用其他API时鉴权。您还可以通过这个视频教程了解如何构造请求调用API：<https://bbs.huaweicloud.com/videos/102987>。

请求 URI

请求URI由如下部分组成：

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

尽管请求URI包含在请求消息头中，但大多数语言或框架都要求您从请求消息中单独传递它，所以在此单独强调。

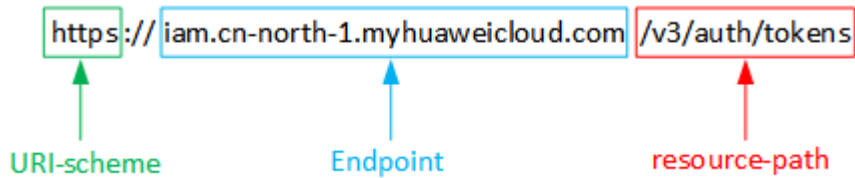
表 3-1 URI 中的参数说明

参数	描述
URI-scheme	表示用于传输请求的协议，当前所有API均采用HTTPS协议。
Endpoint	指定承载REST服务端点的服务器域名或IP，不同服务不同区域的Endpoint不同，您可以从 地区和终端节点 获取。 例如IAM服务在“华北-北京一”区域的Endpoint为“iam.cn-north-1.myhuaweicloud.com”。
resource-path	资源路径，即API访问路径。从具体API的URI模块获取，例如“获取用户Token”API的resource-path为“/v3/auth/tokens”。
query-string	查询参数，是可选部分，并不是每个API都有查询参数。查询参数前面需要带一个“？”，形式为“参数名=参数取值”，例如“limit=10”，表示查询不超过10条数据。

例如您需要获取IAM在“华北-北京一”区域的Token，则需使用“华北-北京一”区域的Endpoint（iam.cn-north-1.myhuaweicloud.com），并在[获取用户Token](#)的URI部分找到resource-path（/v3/auth/tokens），拼接起来如下所示。

```
https://iam.cn-north-1.myhuaweicloud.com/v3/auth/tokens
```

图 3-1 URI 示意图



说明

为查看方便，在每个具体API的URI部分，只给出resource-path部分，并将请求方法写在一起。这是因为URI-scheme都是HTTPS，而Endpoint在同一个区域也相同，所以简洁起见将这两部分省略。

请求方法

HTTP请求方法（也称为操作或动词），它告诉服务你正在请求什么类型的操作。

表 3-2 HTTP 方法

方法	说明
GET	请求服务器返回指定资源。
PUT	请求服务器更新指定资源。
POST	请求服务器新增资源或执行特殊操作。

在[获取用户Token](#)的URI部分，您可以看到其请求方法为“POST”，则其请求为：

```
POST https://iam.cn-north-1.myhuaweicloud.com/v3/auth/tokens
```

请求消息头

附加请求头字段，如指定的URI和HTTP方法所要求的字段。例如定义消息体类型的请求头“Content-Type”，请求鉴权信息等。

详细的公共请求消息头字段请参见[表3-3](#)。

表 3-3 公共请求消息头

名称	描述	是否必选	示例
Content-Type	发送的实体的MIME类型。推荐用户默认使用application/json，如果API是对象、镜像上传等接口，媒体类型可按照流类型的不同进行确定。	是	application/json
Host	请求的服务器信息，从服务API的URL中获取。值为hostname[:port]。端口缺省时使用默认的端口，https的默认端口为443。	否 使用AK/SK认证时该字段必选。	code.test.com or code.test.com:443
Content-Length	请求body长度，单位为Byte。	否	3495
X-Project-Id	project id，项目编号。请参考 获取项目ID 章节获取项目编号。	否	e9993fc787d94b6c886cb aa340f9c0f4
X-Auth-Token	用户Token。 用户Token也就是调用 获取用户Token 接口的响应值，该接口是唯一不需要认证的接口。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。	否 使用Token认证时该字段必选。	注：以下仅为Token示例片段 MIIPAgYJKoZlhvcNAQcCo ...ggg1BBIIlNPXsidG9rZ
X-Language	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn	否	en-us

对于[获取用户Token](#)接口，由于不需要认证，所以只添加“Content-Type”即可，添加消息头后的请求如下所示。

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

请求消息体（可选）

该部分可选。请求消息体通常以结构化格式（如JSON或XML）发出，与请求消息头中Content-Type对应，传递除请求消息头之外的内容。若请求消息体中的参数支持中文，则中文字符必须为UTF-8编码。

每个接口的请求消息体内容不同，也并不是每个接口都需要有请求消息体（或者说消息体为空），GET、DELETE操作类型的接口就不需要消息体，消息体具体内容需要根据具体接口而定。

对于[获取用户Token](#)接口，您可以从接口的请求部分看到所需的请求参数及参数说明。将消息体加入后的请求如下所示，加粗的斜体字段需要根据实际值填写，其中***username***为用户名，***domainname***为用户所属的账号名称，***********为用户登录密码，***xxxxxxxxxxxxxxxxxxxx***为project的名称，如“cn-north-1”，您可以从[地区和终端节点](#)获取。

📖 说明

scope参数定义了Token的作用域，上面示例中获取的Token仅能访问project下的资源。您还可以设置Token的作用域为某个账号下所有资源或账号的某个project下的资源，详细定义请参见[获取用户Token](#)。

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

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

到这里为止这个请求需要的内容就具备齐全了，您可以使用[curl](#)、[Postman](#)或直接编写代码等方式发送请求调用API。对于获取用户Token接口，返回的响应消息头中“x-subject-token”就是需要获取的用户Token。有了Token之后，您就可以使用Token认证调用其他API。

3.2 认证鉴权

调用接口有如下两种认证方式，您可以选择其中一种进行认证鉴权。

- Token认证：通过Token认证通用请求。
- AK/SK认证：通过AK（Access Key ID）/SK（Secret Access Key）加密调用请求。推荐使用AK/SK认证，其安全性比Token认证要高。

Token 认证

📖 说明

Token的有效期为24小时，需要使用一个Token鉴权时，可以先缓存起来，避免频繁调用。

Token在计算机系统中代表令牌（临时）的意思，拥有Token就代表拥有某种权限。Token认证就是在调用API的时候将Token加到请求消息头，从而通过身份认证，获得操作API的权限。

Token可通过调用**获取用户Token**接口获取，调用本服务API需要project级别的Token，即调用**获取用户Token**接口时，请求body中auth.scope的取值需要选择project，如下所示。

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

在**构造请求**中以调用**获取用户Token**接口为例说明了如何调用API。

获取Token后，再调用其他接口时，您需要在请求消息头中添加“X-Auth-Token”，其值即为Token。例如Token值为“ABCDEFJ...”，则调用接口时将“X-Auth-Token: ABCDEFJ...”加到请求消息头即可，如下所示。

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

您还可以通过这个视频教程了解如何使用Token认证：<https://bbs.huaweicloud.com/videos/101333>。

AK/SK 认证

📖 说明

AK/SK签名认证方式仅支持消息体大小12MB以内，12MB以上的请求请使用Token认证。

AK/SK认证就是使用AK/SK对请求进行签名，在请求时将签名信息添加到消息头，从而通过身份认证。

- AK(Access Key ID)：访问密钥ID。与私有访问密钥关联的唯一标识符；访问密钥ID和私有访问密钥一起使用，对请求进行加密签名。
- SK(Secret Access Key)：与访问密钥ID结合使用的密钥，对请求进行加密签名，可标识发送方，并防止请求被修改。

使用AK/SK认证时，您可以基于签名算法使用AK/SK对请求进行签名，也可以使用专门的签名SDK对请求进行签名。详细的签名方法和SDK使用方法请参见[API签名指南](#)。

须知

签名SDK只提供签名功能，与服务提供的SDK不同，使用时请注意。

3.3 返回结果

状态码

请求发送以后，您会收到响应，包含状态码、响应消息头和消息体。

状态码是一组从1xx到5xx的数字代码，状态码表示了请求响应的状态，完整的状态码列表请参见[状态码](#)。

对于[获取用户Token](#)接口，如果调用后返回状态码为“201”，则表示请求成功。

响应消息头

对应请求消息头，响应同样也有消息头，如“Content-type”。

对于[获取用户Token](#)接口，返回如[图3-2](#)所示的消息头，其中“x-subject-token”就是需要获取的用户Token。有了Token之后，您就可以使用Token认证调用其他API。

图 3-2 获取用户 Token 响应消息头

```
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 → MIiYXQYJKoZIhvcNAQcCoIIYtjCCGEOCAQExDTALBglghkgB8ZQMCAgEwgharBgkqhkiG9w0BBwGgghacBIIIWmHsidG9rZW4iOnsiZlhwXlJlc19hdCI6IjIwMTk0MTU0MUMCfj3Kjs6YgKnpVNRbW2eZ5eb785Z0kqjACgkqO1wi4JlGzrpd18LGXK5tdfdq4lqHCYb8P4NaY0NYejcAgzjVefFYtLWT1GSO0zxKZmlQHqj82HBqHdgIZO9fuEbL5dMhdavj+33wElxHRC9I87o+k9-j+CMZSEB7bUGd5Uj6eRASXI1jipPEGA270g1FruooL6jqgIFkNPQuFSOU8+uSsttVwRtNfsC+qTp22Rkd5MCqFGQ8LcuUxC3a+9CMBnOintWW7oeRUVhVpxk8pxiX1wTEboX-RzT6MUbvpvGw-oPNFYxJECKnoH3HRozv0vN--n5d6Nbxg==
x-xss-protection → 1; mode=block;
```

响应消息体（可选）

该部分可选。响应消息体通常以结构化格式（如JSON或XML）返回，与响应消息头中Content-Type对应，传递除响应消息头之外的内容。

对于[获取用户Token](#)接口，返回如下消息体。为篇幅起见，这里只展示部分内容。

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

```

当接口调用出错时，会返回错误码及错误信息说明，错误响应的Body体格式如下所示。

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

其中，“error_code”表示错误码，“error_msg”表示错误描述信息。

4 API (推荐)

4.1 查询数据库引擎的版本

4.1.1 查询数据库引擎的版本

功能介绍

获取指定数据库引擎对应的数据库版本信息。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-1 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
database_name	是	String	数据库引擎。支持的引擎如下，不区分大小写：gaussdb-mysql。

请求参数

表 4-2 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-3 响应 Body 参数

参数	参数类型	描述
datastores	Array of MysqlEngineVersionInfo objects	数据库版本信息列表。

表 4-4 MysqlEngineVersionInfo

参数	参数类型	描述
id	String	数据库版本ID，该字段不会有重复。
name	String	数据库版本号，只返回两位数的大版本号。
version	String	兼容的开源数据库版本号，返回三位开源版本号。
kernel_version	String	数据库内核版本号，返回完整的四位版本号。

状态码：400

表 4-5 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-6 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询TaurusDB数据库的版本信息。

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGaussMySQLEngineVersionRequest request = new ShowGaussMySQLEngineVersionRequest();
        request.withDatabaseName("{database_name}");
        try {
            ShowGaussMySQLEngineVersionResponse response = client.showGaussMySQLEngineVersion(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowGaussMySQLEngineVersionRequest()
```

```
request.database_name = "{database_name}"
response = client.show_gauss_my_sql_engine_version(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

4.2 查询数据库规格

4.2.1 查询数据库规格

功能介绍

获取指定数据库引擎版本对应的规格信息。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-7 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,且长度为32个字符。 默认值: 不涉及。

参数	是否必选	参数类型	描述
database_name	是	String	参数解释: 数据库引擎名称。 约束限制: 不涉及。 取值范围: gaussdb-mysql。 默认值: 不涉及。

表 4-8 Query 参数

参数	是否必选	参数类型	描述
availability_zone_mode	是	String	参数解释: 可用区模式。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• single: 单可用区。• multi: 多可用区。 默认值: 单可用区。
version_name	否	String	参数解释: 数据库版本号。 约束限制: 目前仅支持兼容MySQL 8.0。 取值范围: 8.0。 默认值: 8.0。

参数	是否必选	参数类型	描述
spec_code	否	String	<p>参数解释: 资源规格编码。例如： gaussdb.mysql.xlarge.x86.4。</p> <ul style="list-style-type: none">“gaussdb.mysql”代表产品。“xlarge”代表计算规格为4U。“x86”代表CPU架构为x86。“4”表示vCPU和内存为1:4。 <p>更多规格说明请参考数据库实例规格。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>

请求参数

表 4-9 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释: 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>

参数	是否必选	参数类型	描述
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• en-us• zh-cn 默认值: en-us。

响应参数

状态码: 200

表 4-10 响应 Body 参数

参数	参数类型	描述
flavors	Array of MysqlFlavorsInfo objects	参数解释: 实例规格信息列表。

表 4-11 MysqlFlavorsInfo

参数	参数类型	描述
vcpus	String	参数解释: CPU大小。例如: 1表示1U。 取值范围: 不涉及。
ram	String	参数解释: 内存大小, 单位为GB。 取值范围: 不涉及。

参数	参数类型	描述
type	String	<p>参数解释: 规格类型。</p> <p>取值范围:</p> <ul style="list-style-type: none"> arm: 独享型arm规格。 x86: 独享型x86规格。 generalX86: 通用型X86规格。
id	String	<p>参数解释: 规格ID, 规格的唯一标识。</p> <p>取值范围: 不涉及。</p>
spec_code	String	<p>参数解释: 资源规格编码, 同创建指定的spec_code。例如: gaussdb.mysql.xlarge.x86.4。</p> <ul style="list-style-type: none"> “gaussdb.mysql” 代表产品。 “xlarge” 代表计算规格为4U。 “x86” 代表CPU架构为x86。 “4” 表示vCPU和内存为1:4。 <p>更多规格说明请参考数据库实例规格。</p> <p>取值范围: 不涉及。</p>
version_name	String	<p>参数解释: 数据库版本号。</p> <p>取值范围: 8.0。</p>
instance_mode	String	<p>参数解释: 实例类型。目前仅支持Cluster。</p> <p>取值范围: Cluster。</p>
az_status	Map<String,String>	<p>参数解释: 规格所在AZ的状态。</p> <p>取值范围:</p> <ul style="list-style-type: none"> normal: 在售。 unsupported: 暂不支持该规格。 sellout: 售罄。

状态码: 400

表 4-12 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-13 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询TaurusDB数据库实例指定规格的详细信息。

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

响应示例

状态码：200

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"
    }
  }
]
```

SDK 代码示例

SDK代码示例如下。

Java

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

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

```
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySQLFlavorsSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGaussMySQLFlavorsRequest request = new ShowGaussMySQLFlavorsRequest();
        request.withDatabaseName("{database_name}");
        try {
            ShowGaussMySQLFlavorsResponse response = client.showGaussMySQLFlavors(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = ShowGaussMySQLFlavorsRequest()
    request.database_name = "{database_name}"
    response = client.show_gauss_my_sql_flavors(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3 实例管理

4.3.1 创建数据库实例

功能介绍

创建云数据库TaurusDB实例。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances

表 4-14 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-15 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-16 请求 Body 参数

参数	是否必选	参数类型	描述
region	是	String	区域ID。
name	是	String	实例名称。用于表示实例的名称，同一租户下，同类型的实例名可重名。 取值范围：最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。
datastore	是	MysqlDatastoreInReq object	数据库信息。
mode	是	String	实例类型，目前仅支持Cluster。
flavor_ref	是	String	规格码。使用可参考 查询数据库规格 响应消息表5中的“spec_code”。

参数	是否必选	参数类型	描述
vpc_id	是	String	虚拟私有云ID, 获取方法如下: <ul style="list-style-type: none">方法1: 登录虚拟私有云服务的控制台界面, 在虚拟私有云的详情页面查找VPC ID。方法2: 通过虚拟私有云服务的API接口查询, 具体操作可参考查询VPC列表。
subnet_id	是	String	子网的网络ID, 获取方法如下: <ul style="list-style-type: none">方法1: 登录虚拟私有云服务的控制台界面, 单击VPC下的子网, 进入子网详情页面, 查找网络ID。方法2: 通过虚拟私有云服务的API接口查询, 具体操作可参考查询子网列表。
password	是	String	数据库密码。 取值范围: 至少包含以下字符的三种: 大小写字母、数字和特殊符号 .!@#\$%^*_-=+?,()&, 长度8~32个字符。 建议您输入高强度密码, 以提高安全性, 防止出现密码被暴力破解等安全风险。如果您输入弱密码, 系统会自动判定密码非法。
availability_zone_mode	是	String	可用区类型。 取值范围: <ul style="list-style-type: none">single: 单可用区。multi: 多可用区。
slave_count	是	Integer	只读节点个数。单次接口调用最多支持创建9个只读节点。
charge_info	是	MysqlChargeInfo object	计费类型信息, 支持包年包月和按需, 默认为按需。 说明: DeC专属云账号不支持创建包年/包月实例。

参数	是否必选	参数类型	描述
security_group_id	否	String	安全组ID。如果实例所选用的子网开启网络ACL进行访问控制,则该参数非必选。如果未开启ACL进行访问控制,则该参数必选。获取方法如下: <ul style="list-style-type: none">方法1: 登录虚拟私有云服务的控制台界面,在安全组的详情页面查找安全组ID。方法2: 通过虚拟私有云服务的API接口查询,具体操作可参考查询安全组列表。
configuration_id	否	String	参数模板ID。使用可参考 查询参数模板 中响应消息表5的“id”。
backup_strategy	是	MysqlBackupStrategy object	自动备份策略。
time_zone	否	String	时区。默认时区为UTC。
master_availability_zone	否	String	主可用区ID,创建单可用区实例选填,多可用区实例必填,请参考 地区和终端节点 。
volume	否	MysqlVolume object	volume信息。创建包年/包月实例可选。创建按需实例时不可选。
tags	否	Array of MysqlTags objects	标签列表,根据标签键值对创建实例。 <ul style="list-style-type: none">{key}表示标签键,不可以为空或重复。{value}表示标签值,可以为空。 如果创建实例时同时使用多个标签键值对,中间使用逗号分隔,最多包含10组。
lower_case_table_names	否	Integer	表名大小写是否敏感,默认值是1。 取值范围: <ul style="list-style-type: none">0: 表名被存储成固定且表名称大小写敏感。1: 表名将被存储成小写且表名称大小写不敏感。

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目ID。如果账户开通企业项目服务则该参数必选，未开启该参数不可选。
dedicated_resource_id	否	String	专属资源池ID，只有开通专属资源池后才支持此参数。
restore_point	否	MySQLRestorePoint object	备份恢复信息。
tde_info	否	MySQLTdeInfo object	透明数据加密配置信息，支持AES256、SM4加密算法。 透明加密功能目前处于公测阶段，如需使用，请提交工单联系客服人员申请权限。

表 4-17 MySQLDatastoreInReq

参数	是否必选	参数类型	描述
type	是	String	数据库引擎，现在只支持gaussdb-mysql。
version	是	String	数据库版本。 两位数的大版本号，获取方法请参见 查询数据库引擎的版本 返回的name字段。
kernel_version	否	String	内核数据库版本。如果需要指定具体的内核版本，请联系客服人员添加白名单。 完整的四位内核数据库版本，获取方法请参见 查询数据库引擎的版本 返回的kernel_version字段。

表 4-18 MySQLChargeInfo

参数	是否必选	参数类型	描述
charge_mode	是	String	计费模式。 取值范围： <ul style="list-style-type: none"> prePaid: 预付费，即包年/包月。 postPaid: 后付费，即按需付费。

参数	是否必选	参数类型	描述
period_type	否	String	订购周期类型。 取值范围： <ul style="list-style-type: none"> • month: 包月。 • year: 包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。
period_num	否	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： <ul style="list-style-type: none"> • “period_type”为“month”时，取值为1~9。 • “period_type”为“year”时，取值为1~3。
is_auto_renew	否	String	创建包年/包月实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none"> • true: 为自动续订。 • false: 为不自动续订，默认该方式。
is_auto_pay	否	String	创建包年/包月实例时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none"> • true: 为自动支付，默认该方式。 • false: 为手动支付。

表 4-19 MysqlBackupStrategy

参数	是否必选	参数类型	描述
start_time	是	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。

参数	是否必选	参数类型	描述
keep_days	否	String	自动备份保留天数，取值范围：1-732。

表 4-20 MysqlVolume

参数	是否必选	参数类型	描述
size	是	String	磁盘大小。默认值为10，单位GB。 取值范围：10~128000，必须为10的整数倍。

表 4-21 MysqlTags

参数	是否必选	参数类型	描述
key	是	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。 字符集：A-Z, a-z, 0-9, '-', '_', UNICODE字符 (\u4E00-\u9FFF)。
value	是	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '-', '_', '.', '_', UNICODE字符 (\u4E00-\u9FFF)。

表 4-22 MysqlRestorePoint

参数	是否必选	参数类型	描述
source_instance_id	是	String	源实例ID。
restore_time	否	Long	需要恢复的时间点。(Point-In-Time Recovery, PITR)。
backup_id	否	String	备份文件ID。

参数	是否必选	参数类型	描述
type	否	String	备份类型。当参数为空时，backup_id不能为空，即默认按备份文件恢复。 当参数不为空时，取值范围： <ul style="list-style-type: none">• backup：表示按备份文件恢复。• timestamp：表示按时间点恢复。

表 4-23 MysqlTdeInfo

参数	是否必选	参数类型	描述
enable_tde	是	Boolean	是否打开透明加密功能。
encryption_type	是	String	透明加密算法，支持AES256、SM4加密算法。

响应参数

状态码：201

表 4-24 响应 Body 参数

参数	参数类型	描述
instance	MysqlInstanceResponse object	实例信息
job_id	String	实例创建的任务ID。 仅创建按需实例时会返回该参数。
order_id	String	订单号，创建包年包月时返回该参数。

表 4-25 MysqlInstanceResponse

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	实例名称。用于表示实例的名称。
status	String	实例状态。
datastore	MysqlDatastoreRes object	数据库信息。

参数	参数类型	描述
mode	String	实例类型，仅支持Cluster。
configuration_id	String	参数组ID。
port	String	数据库端口信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
enterprise_project_id	String	企业项目ID。
region	String	区域ID，与请求参数相同。
availability_zone_mode	String	可用区模式，与请求参数相同。
master_availability_zone	String	主可用区ID。
vpc_id	String	虚拟私有云ID，与请求参数相同。
security_group_id	String	安全组ID，与请求参数相同。
subnet_id	String	子网ID，与请求参数相同。
flavor_ref	String	规格码，与请求参数相同。
charge_info	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
volume	MysqlVolumeResponse object	volume信息。创建包年/包月实例有返回。

表 4-26 MysqlDatastoreInRes

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	内核数据库版本。

表 4-27 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 4-28 MysqlChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： <ul style="list-style-type: none">prePaid：预付费，即包年/包月。postPaid：后付费，即按需付费。
period_type	String	订购周期类型。 取值范围： <ul style="list-style-type: none">month：包月。year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： <ul style="list-style-type: none">“period_type”为“month”时，取值为1~9。“period_type”为“year”时，取值为1~3。
is_auto_renew	String	创建包年/包月实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none">true：为自动续订。false：为不自动续订，默认该方式。

参数	参数类型	描述
is_auto_pay	String	创建包年/包月实例时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none"> • true: 为自动支付，默认该方式。 • false: 为手动支付。

表 4-29 MysqlVolumeResp

参数	参数类型	描述
size	Integer	磁盘大小。单位GB。 取值范围：10~128000，为10的整数倍。

状态码：400

表 4-30 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-31 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 创建计费模式为按需计费，自动备份开始时间是08:00-09:00的实例。

```
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
}
```

- 将备份文件恢复到按需计费的新实例。

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": "77fbf305376b4cbea0ae491257b6aaf9br07",
    "type": "backup"
  }
}
```

- 按时间点恢复到按需计费的新实例。

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" : "****",
"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"
}
}
```

- 创建周期为一个月的包年/包月实例。

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

```
{
  "name" : "gaussdb-mysql-instance4",
  "region" : "br-iaas-odin1",
  "charge_info" : {
    "charge_mode" : "prePaid",
    "period_type" : "month",
    "period_num" : 1,
    "is_auto_renew" : false,
    "is_auto_pay" : true
  },
  "volume" : {
    "size" : 10
  },
  "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",
    "restore_time" : 1673852043000,
    "type" : "timestamp"
  }
}
```

响应示例

状态码：201

Success.

- 创建按需实例。

```
{
  "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",
    "kernel_version" : "2.0.28.18"
  },
  "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"
}
```

- 创建周期为一个月的包年/包月实例。

```
{
  "instance" : {
    "id" : "945419c2208e4a5d828b8dddc00223e1in07",
    "name" : "gaussdb-mysql-instance4",
    "status" : "BUILD",
    "region" : "br-iaas-odin1",
    "charge_info" : {
      "charge_mode" : "prePaid",
      "period_type" : "month",
      "period_num" : 1,
      "is_auto_renew" : false,
      "is_auto_pay" : true
    },
    "volume" : {
      "size" : 10
    },
    "datastore" : {
      "type" : "gaussdb-mysql",
      "version" : "8.0",
      "kernel_version" : "2.0.28.18"
    },
    "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"
  },
  "order_id" : "CS2308241236EEXVF"
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 创建计费模式为按需计费，自动备份开始时间是08:00-09:00的实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateGaussMySQLInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLInstanceRequest request = new CreateGaussMySQLInstanceRequest();
        MySQLInstanceRequest body = new MySQLInstanceRequest();
        MySQLBackupStrategy backupStrategybody = new MySQLBackupStrategy();
        backupStrategybody.withStartTime("08:00-09:00");
        MySQLDatastoreInReq datastorebody = new MySQLDatastoreInReq();
        datastorebody.withType("gaussdb-mysql")
            .withVersion("8.0");
        MySQLChargeInfo chargeInfobody = new MySQLChargeInfo();
        chargeInfobody.withChargeMode(MySQLChargeInfo.ChargeModeEnum.fromValue("postPaid"));
        body.withEnterpriseProjectId("0");
        body.withSlaveCount(1);
        body.withAvailabilityZoneMode("single");
        body.withBackupStrategy(backupStrategybody);
        body.withPassword("****");
        body.withConfigurationId("43570e0de32e40c5a15f831aa5ce4176pr07");
        body.withSecurityGroupId("fc577a1a-f202-424a-977f-24faec3fdd55");
        body.withSubnetId("c1cfa53c-65d3-431e-8552-326bf310c7ad");
        body.withVpcId("3cedfc54-b105-4652-a4e0-847b11576b58");
        body.withFlavorRef("gaussdb.mysql.xlarge.arm.4");
        body.withMode("Cluster");
        body.withDatastore(datastorebody);
        body.withName("gaussdb-mysql-instance1");
        body.withRegion("br-iaas-odin1");
        body.withChargeInfo(chargeInfobody);
        request.withBody(body);
        try {
            CreateGaussMySQLInstanceResponse response = client.createGaussMySQLInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        }
    }
}
```

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

- 将备份文件恢复到按需计费的新实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateGaussMySQLInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLInstanceRequest request = new CreateGaussMySQLInstanceRequest();
        MySQLInstanceRequest body = new MySQLInstanceRequest();
        MySQLRestorePoint restorePointbody = new MySQLRestorePoint();
        restorePointbody.withSourceInstanceId("7033e7c3cf93438797d44ad7ae0a7d95in07")
            .withBackupId("7ffb305376b4cbea0ae491257b6aaf9br07")
            .withType("backup");
        MySQLBackupStrategy backupStrategybody = new MySQLBackupStrategy();
        backupStrategybody.withStartTime("08:00-09:00");
        MySQLDatastoreInReq datastorebody = new MySQLDatastoreInReq();
        datastorebody.withType("gaussdb-mysql")
            .withVersion("8.0");
        MySQLChargeInfo chargeInfobody = new MySQLChargeInfo();
        chargeInfobody.withChargeMode(MySQLChargeInfo.ChargeModeEnum.fromValue("postPaid"));
        body.withRestorePoint(restorePointbody);
        body.withEnterpriseProjectId("0");
        body.withSlaveCount(1);
        body.withAvailabilityZoneMode("single");
        body.withBackupStrategy(backupStrategybody);
        body.withPassword("****");
        body.withConfigurationId("43570e0de32e40c5a15f831aa5ce4176pr07");
        body.withSecurityGroupId("fc577a1a-f202-424a-977f-24faec3fdd55");
        body.withSubnetId("c1cfa53c-65d3-431e-8552-326bf310c7ad");
        body.withVpcId("3cedfc54-b105-4652-a4e0-847b11576b58");
        body.withFlavorRef("gaussdb.mysql.xlarge.arm.4");
        body.withMode("Cluster");
    }
}
```

```
body.withDatastore(datastorebody);
body.withName("gaussdb-mysql-instance2");
body.withRegion("br-iaas-odin1");
body.withChargeInfo(chargeInfobody);
request.withBody(body);
try {
    CreateGaussMySQLInstanceResponse response = client.createGaussMySQLInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 按时间点恢复到按需计费的新实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateGaussMySQLInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLInstanceRequest request = new CreateGaussMySQLInstanceRequest();
        MySQLInstanceRequest body = new MySQLInstanceRequest();
        MySQLRestorePoint restorePointbody = new MySQLRestorePoint();
        restorePointbody.withRestoreTime(1673852043000L)
            .withSourceInstanceId("7033e7c3cf93438797d44ad7ae0a7d95in07")
            .withType("timestamp");
        MySQLBackupStrategy backupStrategybody = new MySQLBackupStrategy();
        backupStrategybody.withStartTime("08:00-09:00");
        MySQLDatastoreInReq datastorebody = new MySQLDatastoreInReq();
        datastorebody.withType("gaussdb-mysql")
            .withVersion("8.0");
        MySQLChargeInfo chargeInfobody = new MySQLChargeInfo();
        chargeInfobody.withChargeMode(MySQLChargeInfo.ChargeModeEnum.fromValue("postPaid"));
```

```
body.withRestorePoint(restorePointbody);
body.withEnterpriseProjectId("0");
body.withSlaveCount(1);
body.withAvailabilityZoneMode("single");
body.withBackupStrategy(backupStrategybody);
body.withPassword("****");
body.withConfigurationId("43570e0de32e40c5a15f831aa5ce4176pr07");
body.withSecurityGroupId("fc577a1a-f202-424a-977f-24faec3fdd55");
body.withSubnetId("c1cfa53c-65d3-431e-8552-326bf310c7ad");
body.withVpcId("3cedfc54-b105-4652-a4e0-847b11576b58");
body.withFlavorRef("gaussdb.mysql.xlarge.arm.4");
body.withMode("Cluster");
body.withDatastore(datastorebody);
body.withName("gaussdb-mysql-instance3");
body.withRegion("br-iaas-odin1");
body.withChargeInfo(chargeInfobody);
request.withBody(body);
try {
    CreateGaussMySQLInstanceResponse response = client.createGaussMySQLInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 创建周期为一个月的包年/包月实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateGaussMySQLInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLInstanceRequest request = new CreateGaussMySQLInstanceRequest();
```

```
MysqlInstanceRequest body = new MysqlInstanceRequest();
MysqlRestorePoint restorePointbody = new MysqlRestorePoint();
restorePointbody.withRestoreTime(1673852043000L)
    .withType("timestamp");
MysqlVolume volumebody = new MysqlVolume();
volumebody.withSize("10");
MysqlBackupStrategy backupStrategybody = new MysqlBackupStrategy();
backupStrategybody.withStartTime("08:00-09:00");
MysqlDatastoreInReq datastorebody = new MysqlDatastoreInReq();
datastorebody.withType("gaussdb-mysql")
    .withVersion("8.0");
MysqlChargeInfo chargeInfobody = new MysqlChargeInfo();
chargeInfobody.withChargeMode(MysqlChargeInfo.ChargeModeEnum.fromValue("prePaid"))
    .withPeriodType(MysqlChargeInfo.PeriodTypeEnum.fromValue("month"))
    .withPeriodNum(1)
    .withIsAutoRenew("false")
    .withIsAutoPay("true");
body.withRestorePoint(restorePointbody);
body.withEnterpriseProjectId("0");
body.withVolume(volumebody);
body.withSlaveCount(1);
body.withAvailabilityZoneMode("single");
body.withBackupStrategy(backupStrategybody);
body.withPassword("****");
body.withConfigurationId("43570e0de32e40c5a15f831aa5ce4176pr07");
body.withSecurityGroupId("fc577a1a-f202-424a-977f-24faec3fdd55");
body.withSubnetId("c1cfa53c-65d3-431e-8552-326bf310c7ad");
body.withVpcId("3cedfc54-b105-4652-a4e0-847b11576b58");
body.withFlavorRef("gaussdb.mysql.xlarge.arm.4");
body.withMode("Cluster");
body.withDatastore(datastorebody);
body.withName("gaussdb-mysql-instance4");
body.withRegion("br-iaas-odin1");
body.withChargeInfo(chargeInfobody);
request.withBody(body);
try {
    CreateGaussMySqlInstanceResponse response = client.createGaussMySqlInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 创建计费模式为按需计费，自动备份开始时间是08:00-09:00的实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = CreateGaussMySqlInstanceRequest()
    backupStrategybody = MysqlBackupStrategy(
        start_time="08:00-09:00"
    )
    dataStorebody = MysqlDataStoreInReq(
        type="gaussdb-mysql",
        version="8.0"
    )
    chargeInfobody = MysqlChargeInfo(
        charge_mode="postPaid"
    )
    request.body = MysqlInstanceRequest(
        enterprise_project_id="0",
        slave_count=1,
        availability_zone_mode="single",
        backup_strategy=backupStrategybody,
        password="****",
        configuration_id="43570e0de32e40c5a15f831aa5ce4176pr07",
        security_group_id="fc577a1a-f202-424a-977f-24faec3fdd55",
        subnet_id="c1cfa53c-65d3-431e-8552-326bf310c7ad",
        vpc_id="3cedfc54-b105-4652-a4e0-847b11576b58",
        flavor_ref="gaussdb.mysql.xlarge.arm.4",
        mode="Cluster",
        dataStore=dataStorebody,
        name="gaussdb-mysql-instance1",
        region="br-iaas-odin1",
        charge_info=chargeInfobody
    )
    response = client.create_gauss_my_sql_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 将备份文件恢复到按需计费的新实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = CreateGaussMySqlInstanceRequest()
    restorePointbody = MysqlRestorePoint(
        source_instance_id="7033e7c3cf93438797d44ad7ae0a7d95in07",
        backup_id="7ffb305376b4cbea0ae491257b6aaf9br07",
        type="backup"
    )
    backupStrategybody = MysqlBackupStrategy(
        start_time="08:00-09:00"
    )
    dataStorebody = MysqlDataStoreInReq(
        type="gaussdb-mysql",
        version="8.0"
    )
    chargeInfobody = MysqlChargeInfo(
        charge_mode="postPaid"
    )
    request.body = MysqlInstanceRequest(
        restore_point=restorePointbody,
        enterprise_project_id="0",
        slave_count=1,
        availability_zone_mode="single",
        backup_strategy=backupStrategybody,
        password="****",
        configuration_id="43570e0de32e40c5a15f831aa5ce4176pr07",
        security_group_id="fc577a1a-f202-424a-977f-24faec3fdd55",
        subnet_id="c1cfa53c-65d3-431e-8552-326bf310c7ad",
        vpc_id="3cedfc54-b105-4652-a4e0-847b11576b58",
        flavor_ref="gaussdb.mysql.xlarge.arm.4",
        mode="Cluster",
        dataStore=dataStorebody,
        name="gaussdb-mysql-instance2",
        region="br-iaas-odin1",
        charge_info=chargeInfobody
    )
    response = client.create_gauss_my_sql_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 按时间点恢复到按需计费的新实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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



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

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

try:
    request = CreateGaussMySqlInstanceRequest()
    restorePointbody = MysqlRestorePoint(
        restore_time=1673852043000,
        source_instance_id="7033e7c3cf93438797d44ad7ae0a7d95in07",
        type="timestamp"
    )
    backupStrategybody = MysqlBackupStrategy(
        start_time="08:00-09:00"
    )
    dataStorebody = MysqlDataStoreInReq(
        type="gaussdb-mysql",
        version="8.0"
    )
    chargeInfobody = MysqlChargeInfo(
        charge_mode="postPaid"
    )
    request.body = MysqlInstanceRequest(
        restore_point=restorePointbody,
        enterprise_project_id="0",
        slave_count=1,
        availability_zone_mode="single",
        backup_strategy=backupStrategybody,
        password="****",
        configuration_id="43570e0de32e40c5a15f831aa5ce4176pr07",
        security_group_id="fc577a1a-f202-424a-977f-24faec3fdd55",
        subnet_id="c1cfa53c-65d3-431e-8552-326bf310c7ad",
        vpc_id="3cedfc54-b105-4652-a4e0-847b11576b58",
        flavor_ref="gaussdb.mysql.xlarge.arm.4",
        mode="Cluster",
        dataStore=dataStorebody,
        name="gaussdb-mysql-instance3",
        region="br-iaas-odin1",
        charge_info=chargeInfobody
    )
    response = client.create_gauss_my_sql_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 创建周期为一个月的包年/包月实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = CreateGaussMySqlInstanceRequest()
    restorePointbody = MysqlRestorePoint(
        restore_time=1673852043000,
        source_instance_id="7033e7c3cf93438797d44ad7ae0a7d95in07",
        type="timestamp"
    )
    volumebody = MysqlVolume(
        size="10"
    )
    backupStrategybody = MysqlBackupStrategy(
        start_time="08:00-09:00"
    )
    datastorebody = MysqlDatastoreInReq(
        type="gaussdb-mysql",
        version="8.0"
    )
    chargeInfobody = MysqlChargeInfo(
        charge_mode="prePaid",
        period_type="month",
        period_num=1,
        is_auto_renew="false",
        is_auto_pay="true"
    )
    request.body = MysqlInstanceRequest(
        restore_point=restorePointbody,
        enterprise_project_id="0",
        volume=volumebody,
        slave_count=1,
        availability_zone_mode="single",
        backup_strategy=backupStrategybody,
        password="****",
        configuration_id="43570e0de32e40c5a15f831aa5ce4176pr07",
        security_group_id="fc577a1a-f202-424a-977f-24faec3fdd55",
        subnet_id="c1cfa53c-65d3-431e-8552-326bf310c7ad",
        vpc_id="3cedfc54-b105-4652-a4e0-847b11576b58",
        flavor_ref="gaussdb.mysql.xlarge.arm.4",
        mode="Cluster",
        datastore=datastorebody,
        name="gaussdb-mysql-instance4",
        region="br-iaas-odin1",
        charge_info=chargeInfobody
    )
    response = client.create_gauss_my_sql_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- 创建计费模式为按需计费，自动备份开始时间是08:00-09:00的实例。

```
package main

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

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    // environment variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before  
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    // environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CreateGaussMySQLInstanceRequest{}  
    backupStrategybody := &model.MySQLBackupStrategy{  
        StartTime: "08:00-09:00",  
    }  
    dataStorebody := &model.MySQLDataStoreInReq{  
        Type: "gaussdb-mysql",  
        Version: "8.0",  
    }  
    chargeInfobody := &model.MySQLChargeInfo{  
        ChargeMode: model.GetMySQLChargeInfoChargeModeEnum().POST_PAID,  
    }  
    enterpriseProjectIdMySQLInstanceRequest := "0"  
    configurationIdMySQLInstanceRequest := "43570e0de32e40c5a15f831aa5ce4176pr07"  
    securityGroupIdMySQLInstanceRequest := "fc577a1a-f202-424a-977f-24faec3fdd55"  
    request.Body = &model.MySQLInstanceRequest{  
        EnterpriseProjectId: &enterpriseProjectIdMySQLInstanceRequest,  
        SlaveCount: int32(1),  
        AvailabilityZoneMode: "single",  
        BackupStrategy: backupStrategybody,  
        Password: "****",  
        ConfigurationId: &configurationIdMySQLInstanceRequest,  
        SecurityGroupId: &securityGroupIdMySQLInstanceRequest,  
        SubnetId: "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
        VpcId: "3cedfc54-b105-4652-a4e0-847b11576b58",  
        FlavorRef: "gaussdb.mysql.xlarge.arm.4",  
        Mode: "Cluster",  
        Datastore: dataStorebody,  
        Name: "gaussdb-mysql-instance1",  
        Region: "br-iaas-odin1",  
        ChargeInfo: chargeInfobody,  
    }  
    response, err := client.CreateGaussMySQLInstance(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

- 将备份文件恢复到按需计费的新实例。

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
```

```
gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    // environment variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before  
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    // environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CreateGaussMySQLInstanceRequest{  
        backupIdRestorePoint:= "7ffb305376b4cbea0ae491257b6aaf9br07"  
        typeRestorePoint:= "backup"  
        restorePointbody := &model.MySQLRestorePoint{  
            SourceInstanceId: "7033e7c3cf93438797d44ad7ae0a7d95in07",  
            BackupId: &backupIdRestorePoint,  
            Type: &typeRestorePoint,  
        }  
        backupStrategybody := &model.MySQLBackupStrategy{  
            StartTime: "08:00-09:00",  
        }  
        dataStorebody := &model.MySQLDataStoreInReq{  
            Type: "gaussdb-mysql",  
            Version: "8.0",  
        }  
        chargeInfobody := &model.MySQLChargeInfo{  
            ChargeMode: model.GetMySQLChargeInfoChargeModeEnum().POST_PAID,  
        }  
        enterpriseProjectIdMySQLInstanceRequest:= "0"  
        configurationIdMySQLInstanceRequest:= "43570e0de32e40c5a15f831aa5ce4176pr07"  
        securityGroupIdMySQLInstanceRequest:= "fc577a1a-f202-424a-977f-24faec3fdd55"  
        request.Body = &model.MySQLInstanceRequest{  
            RestorePoint: restorePointbody,  
            EnterpriseProjectId: &enterpriseProjectIdMySQLInstanceRequest,  
            SlaveCount: int32(1),  
            AvailabilityZoneMode: "single",  
            BackupStrategy: backupStrategybody,  
            Password: "****",  
            ConfigurationId: &configurationIdMySQLInstanceRequest,  
            SecurityGroupId: &securityGroupIdMySQLInstanceRequest,  
            SubnetId: "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
            VpId: "3cedfc54-b105-4652-a4e0-847b11576b58",  
            FlavorRef: "gaussdb.mysql.xlarge.arm.4",  
            Mode: "Cluster",  
            Datastore: dataStorebody,  
            Name: "gaussdb-mysql-instance2",  
            Region: "br-iaas-odin1",  
            ChargeInfo: chargeInfobody,  
        }  
    }  
    response, err := client.CreateGaussMySQLInstance(request)  
    if err == nil {
```

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

- 按时间点恢复到按需计费的新实例。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySQLInstanceRequest{}
    restoreTimeRestorePoint := int64(1673852043000)
    typeRestorePoint := "timestamp"
    restorePointbody := &model.MySQLRestorePoint{
        RestoreTime: &restoreTimeRestorePoint,
        SourceInstanceId: "7033e7c3cf93438797d44ad7ae0a7d95in07",
        Type: &typeRestorePoint,
    }
    backupStrategybody := &model.MySQLBackupStrategy{
        StartTime: "08:00-09:00",
    }
    dataStorebody := &model.MySQLDataStoreInReq{
        Type: "gaussdb-mysql",
        Version: "8.0",
    }
    chargeInfobody := &model.MySQLChargeInfo{
        ChargeMode: model.GetMySQLChargeInfoChargeModeEnum().POST_PAID,
    }
    enterpriseProjectIdMySQLInstanceRequest := "0"
    configurationIdMySQLInstanceRequest := "43570e0de32e40c5a15f831aa5ce4176pr07"
    securityGroupIdMySQLInstanceRequest := "fc577a1a-f202-424a-977f-24faec3fdd55"
    request.Body = &model.MySQLInstanceRequest{
        RestorePoint: restorePointbody,
        EnterpriseProjectId: &enterpriseProjectIdMySQLInstanceRequest,
        SlaveCount: int32(1),
        AvailabilityZoneMode: "single",
        BackupStrategy: backupStrategybody,
        Password: "****",
        ConfigurationId: &configurationIdMySQLInstanceRequest,
        SecurityGroupId: &securityGroupIdMySQLInstanceRequest,
```

```
SubnetId: "c1cfa53c-65d3-431e-8552-326bf310c7ad",
VpcId: "3cedfc54-b105-4652-a4e0-847b11576b58",
FlavorRef: "gaussdb.mysql.xlarge.arm.4",
Mode: "Cluster",
Datastore: datastorebody,
Name: "gaussdb-mysql-instance3",
Region: "br-iaas-odin1",
ChargeInfo: chargeInfobody,
}
response, err := client.CreateGaussMySqlInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 创建周期为一个月的包年/包月实例。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySqlInstanceRequest{
        restoreTimeRestorePoint:= int64(1673852043000)
        typeRestorePoint:= "timestamp"
        restorePointbody := &model.MysqlRestorePoint{
            RestoreTime: &restoreTimeRestorePoint,
            SourceInstanceId: "7033e7c3cf93438797d44ad7ae0a7d95in07",
            Type: &typeRestorePoint,
        }
        volumebody := &model.MysqlVolume{
            Size: "10",
        }
        backupStrategybody := &model.MysqlBackupStrategy{
            StartTime: "08:00-09:00",
        }
        datastorebody := &model.MysqlDatastoreInReq{
            Type: "gaussdb-mysql",
            Version: "8.0",
        }
        periodTypeChargeInfo:= model.GetMysqlChargeInfoPeriodTypeEnum().MONTH
    }
```

```

periodNumChargeInfo:= int32(1)
isAutoRenewChargeInfo:= "false"
isAutoPayChargeInfo:= "true"
chargeInfobody := &model.MysqlChargeInfo{
    ChargeMode: model.GetMysqlChargeInfoChargeModeEnum().PRE_PAID,
    PeriodType: &periodTypeChargeInfo,
    PeriodNum: &periodNumChargeInfo,
    IsAutoRenew: &isAutoRenewChargeInfo,
    IsAutoPay: &isAutoPayChargeInfo,
}
enterpriseProjectIdMysqlInstanceRequest:= "0"
configurationIdMysqlInstanceRequest:= "43570e0de32e40c5a15f831aa5ce4176pr07"
securityGroupIdMysqlInstanceRequest:= "fc577a1a-f202-424a-977f-24faec3fdd55"
request.Body = &model.MysqlInstanceRequest{
    RestorePoint: restorePointbody,
    EnterpriseProjectId: &enterpriseProjectIdMysqlInstanceRequest,
    Volume: volumebody,
    SlaveCount: int32(1),
    AvailabilityZoneMode: "single",
    BackupStrategy: backupStrategybody,
    Password: "****",
    ConfigurationId: &configurationIdMysqlInstanceRequest,
    SecurityGroupId: &securityGroupIdMysqlInstanceRequest,
    SubnetId: "c1cfa53c-65d3-431e-8552-326bf310c7ad",
    VpId: "3cedfc54-b105-4652-a4e0-847b11576b58",
    FlavorRef: "gaussdb.mysql.xlarge.arm.4",
    Mode: "Cluster",
    Datastore: datastorebody,
    Name: "gaussdb-mysql-instance4",
    Region: "br-iaas-odin1",
    ChargeInfo: chargeInfobody,
}
response, err := client.CreateGaussMySqlInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}

```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.2 重启数据库实例

功能介绍

重启数据库实例。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-32 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-33 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-34 请求 Body 参数

参数	是否必选	参数类型	描述
delay	否	Boolean	实例是否延迟重启，默认 false，立即重启。 取值范围： <ul style="list-style-type: none">• true: 延迟重启，实例将在运维时间窗内自动重启。• false: 立即重启。

响应参数

状态码：200

表 4-35 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-36 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-37 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置TaurusDB实例在运维时间窗内重启。

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

```
{  
  "delay": true  
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

设置TaurusDB实例在运维时间窗内重启。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class RestartGaussMySQLInstanceSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        RestartGaussMySQLInstanceRequest request = new RestartGaussMySQLInstanceRequest();  
        request.withInstanceId("{instance_id}");  
        TaurusRestartInstanceRequest body = new TaurusRestartInstanceRequest();  
        body.withDelay(true);  
        request.withBody(body);  
        try {  
            RestartGaussMySQLInstanceResponse response = client.restartGaussMySQLInstance(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        }  
    }  
}
```

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

Python

设置TaurusDB实例在运维时间窗内重启。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestartGaussMySQLInstanceRequest()
        request.instance_id = "{instance_id}"
        request.body = TaurusRestartInstanceRequest(
            delay=True
        )
        response = client.restart_gauss_my_sql_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置TaurusDB实例在运维时间窗内重启。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestartGaussMySQLInstanceRequest{}
    request.InstanceId = "{instance_id}"
    delayTaurusRestartInstanceRequest:= true
    request.Body = &model.TaurusRestartInstanceRequest{
        Delay: &delayTaurusRestartInstanceRequest,
    }
    response, err := client.RestartGaussMySQLInstance(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.3 删除/退订数据库实例

功能介绍

删除/退订数据库实例。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-38 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-39 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-40 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。
order_id	String	订单号，仅包年/包月返回该参数。

状态码：400

表 4-41 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-42 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 退订指定的包年/包月实例。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07
```

- 删除指定按需实例。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
7f5bed98332e493a8a2d213c233ff556in07
```

响应示例

状态码：200

Success.

- 退订包周期实例。

```
{  
  "job_id" : null,  
  "order_id" : "CS2305230939BMXV8"  
}
```

- 删除按需实例。

```
{  
  "job_id" : "e82673f9-a8cc-45cf-973b-c201b7cda610",  
  "order_id" : null  
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DeleteGaussMySQLInstanceSolution {

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

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

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.4 创建只读节点

功能介绍

创建只读节点。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-43 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-44 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-45 请求 Body 参数

参数	是否必选	参数类型	描述
priorities	是	Array of integers	指定创建的只读节点故障倒换优先级。 故障倒换优先级的取值范围为1~16，数字越小，优先级越大，即故障倒换时，主节点会优先倒换到优先级高的只读节点上，优先级相同的只读节点选为主节点的概率相同。最多支持9个只读节点设置故障倒换优先级，超过9个的只读节点优先级默认为-1，表示不会参与倒换。可通过修改节点的故障倒换优先级来进行调整。
is_auto_pay	否	String	创建包年/包月实例时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none">true: 为自动支付，默认该方式。false: 为手动支付。

参数	是否必选	参数类型	描述
availability_zones	否	Array of strings	<p>可用区。可指定可用区创建只读节点，不传该参数时默认为自动选择可用区。</p> <p>该参数目前处于公测阶段，如需使用，请提交工单联系客服人员申请权限。</p> <p>调用查询数据库规格获取，其中az_status中的key为availability_zone。</p> <p>注：指定可用区创建只读节点，可能由于资源不足创建失败。</p>

响应参数

状态码：201

表 4-46 响应 Body 参数

参数	参数类型	描述
instance_id	String	实例ID，严格匹配UUID规则。
node_names	Array of strings	节点名称列表。
job_id	String	<p>创建只读节点的任务ID。</p> <p>仅创建按需只读节点时会返回该参数。</p>
order_id	String	订单号，创建包年包月只读节点时返回该参数。

状态码：400

表 4-47 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-48 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

为实例创建只读节点。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
8cb89e25e0444f1fa9b2145dff29cabdin07/nodes/enlarge  
  
{  
  "priorities": [ 1, 2 ]  
}
```

响应示例

状态码: 201

Success.

```
{  
  "instance_id": "8cb89e25e0444f1fa9b2145dff29cabdin07",  
  "node_names": [ "gauss-ccf5_node03", "gauss-ccf5_node04" ],  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

为实例创建只读节点。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreateGaussMySQLReadOnlyNodeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
CreateGaussMySQLReadOnlyNodeRequest request = new CreateGaussMySQLReadOnlyNodeRequest();
request.withInstanceId("{instance_id}");
MysqlCreateReadOnlyNodeRequest body = new MysqlCreateReadOnlyNodeRequest();
List<Integer> listbodyPriorities = new ArrayList<>();
listbodyPriorities.add(1);
listbodyPriorities.add(2);
body.withPriorities(listbodyPriorities);
request.withBody(body);
try {
    CreateGaussMySQLReadOnlyNodeResponse response =
client.createGaussMySQLReadOnlyNode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

为实例创建只读节点。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
```

```
request = CreateGaussMySqlReadOnlyNodeRequest()
request.instance_id = "{instance_id}"
listPrioritiesbody = [
    1,
    2
]
request.body = MysqlCreateReadOnlyNodeRequest(
    priorities=listPrioritiesbody
)
response = client.create_gauss_my_sql_readonly_node(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

为实例创建只读节点。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySqlReadOnlyNodeRequest{}
    request.InstanceId = "{instance_id}"
    var listPrioritiesbody = []int32{
        int32(1),
        int32(2),
    }
    request.Body = &model.MysqlCreateReadOnlyNodeRequest{
        Priorities: listPrioritiesbody,
    }
    response, err := client.CreateGaussMySqlReadOnlyNode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.5 删除/退订只读节点

功能介绍

删除/退订实例的只读节点。多可用区模式删除/退订只读节点时，要保证删除/退订后，剩余的只读节点和主节点在不同的可用区中，否则无法删除/退订该只读节点。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-49 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
node_id	是	String	节点ID，严格匹配UUID规则。

请求参数

表 4-50 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-51 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。
order_id	String	订单号，仅包年/包月返回该参数。

状态码：400

表 4-52 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-53 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除指定包年/包月实例的只读节点。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/nodes/ss62c18799854a919bab633874c159dfno01
```

响应示例

状态码: 200

Success.

```
{  
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890",  
  "order_id" : "CS2305230939BMXV8"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class DeleteGaussMySQLReadOnlyNodeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
DeleteGaussMySQLReadOnlyNodeRequest request = new DeleteGaussMySQLReadOnlyNodeRequest();
request.withInstanceId("{instance_id}");
request.withNodeId("{node_id}");
try {
    DeleteGaussMySQLReadOnlyNodeResponse response =
client.deleteGaussMySQLReadOnlyNode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

import (
    "fmt"
```

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.6 包年/包月实例存储扩容

功能介绍

包年/包月实例存储扩容。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-54 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-55 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-56 请求 Body 参数

参数	是否必选	参数类型	描述
size	是	Integer	扩容后的容量。包年/包月实例初始最小磁盘规格为10G，实例所选容量大小必须为10的整数倍，且大于实际使用容量，最大为128000GB。 取值范围： 扩容时必须大于等于20G。 缩容时必须大于等于10G。
is_auto_pay	否	String	表示是否自动从客户的账户中支付。 <ul style="list-style-type: none">• true: 为自动支付，默认该方式。• false: 为手动支付。

响应参数

状态码：201

表 4-57 响应 Body 参数

参数	参数类型	描述
size	Integer	扩容后容量。
order_id	String	订单号。

状态码：400

表 4-58 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-59 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

扩容包年/包月实例的磁盘容量至50GB。

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

响应示例

状态码: 201

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

扩容包年/包月实例的磁盘容量至50GB。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ExpandGaussMySQLInstanceVolumeSolution {

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

ExpandGaussMySqlInstanceVolumeRequest request = new
ExpandGaussMySqlInstanceVolumeRequest();
request.withInstanceId("{instance_id}");
MysqlExtendInstanceVolumeRequest body = new MysqlExtendInstanceVolumeRequest();
body.withSize(50);
request.withBody(body);
try {
    ExpandGaussMySqlInstanceVolumeResponse response =
client.expandGaussMySqlInstanceVolume(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

扩容包年/包月实例的磁盘容量至50GB。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ExpandGaussMySqlInstanceVolumeRequest()
        request.instance_id = "{instance_id}"
        request.body = MysqlExtendInstanceVolumeRequest(
            size=50
        )
```

```
response = client.expand_gauss_my_sql_instance_volume(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

扩容包年/包月实例的磁盘容量至50GB。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ExpandGaussMySQLInstanceVolumeRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.MySQLExtendInstanceVolumeRequest{
        Size: int32(50),
    }
    response, err := client.ExpandGaussMySQLInstanceVolume(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.7 修改实例名称

功能介绍

修改实例名称。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-60 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-61 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-62 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	实例名称。 用于表示实例的名称，同一租户下，同类型的实例名可重名。取值范围：最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。
is_modify_node_name	否	String	是否同步修改节点名称，取值：true或false，默认值为true。

响应参数

状态码：200

表 4-63 响应 Body 参数

参数	参数类型	描述
job_id	String	修改实例名称的任务ID。

状态码：400

表 4-64 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-65 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例的名称为“gaussdb-name”。

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

修改实例的名称为“gaussdb-name”。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;
```

```
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateGaussMySQLInstanceNameSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateGaussMySQLInstanceNameRequest request = new UpdateGaussMySQLInstanceNameRequest();
        request.withInstanceId("{instance_id}");
        MySQLUpdateInstanceNameRequest body = new MySQLUpdateInstanceNameRequest();
        body.withName("gaussdb-name");
        request.withBody(body);
        try {
            UpdateGaussMySQLInstanceNameResponse response =
client.updateGaussMySQLInstanceName(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

修改实例的名称为“gaussdb-name”。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = UpdateGaussMySQLInstanceNameRequest()
    request.instance_id = "{instance_id}"
    request.body = MysqlUpdateInstanceNameRequest(
        name="gaussdb-name"
    )
    response = client.update_gauss_my_sql_instance_name(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改实例的名称为“gaussdb-name”。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySQLInstanceNameRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.MysqlUpdateInstanceNameRequest{
        Name: "gaussdb-name",
    }
    response, err := client.UpdateGaussMySQLInstanceName(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.8 重置数据库密码

功能介绍

重置数据库密码。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-66 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-67 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-68 请求 Body 参数

参数	是否必选	参数类型	描述
password	是	String	数据库密码。 取值范围：至少包含以下字符的三种：大小写字母、数字和特殊符号 . ~!@#%^^*_-=+?,()&，长度8~32个字符。建议您输入高强度密码，以提高安全性，防止出现密码被暴力破解等安全风险。如果您输入弱密码，系统会自动判定密码非法。

响应参数

状态码：400

表 4-69 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-70 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重置数据库密码。

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

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

重置数据库密码。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ResetGaussMySQLPasswordSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()
```



```
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
ResetGaussMySQLPasswordRequest request = new ResetGaussMySQLPasswordRequest();
request.withInstanceId("{instance_id}");
MysqlResetPasswordRequest body = new MysqlResetPasswordRequest();
body.withPassword("****");
request.withBody(body);
try {
    ResetGaussMySQLPasswordResponse response = client.resetGaussMySQLPassword(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

重置数据库密码。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ResetGaussMySQLPasswordRequest()
        request.instance_id = "{instance_id}"
        request.body = MysqlResetPasswordRequest(
            password="****"
        )
        response = client.reset_gauss_my_sql_password(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

重置数据库密码。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResetGaussMySQLPasswordRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.MysqlResetPasswordRequest{
        Password: "****",
    }
    response, err := client.ResetGaussMySQLPassword(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.9 变更实例规格

功能介绍

变更数据库实例的规格。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-71 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-72 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-73 请求 Body 参数

参数	是否必选	参数类型	描述
resize_flavor	是	MysqlResizeFlavor object	规格变更信息。
is_auto_pay	否	String	变更包年/包月实例规格时可指定，表示是否自动从客户的账户中支付。 <ul style="list-style-type: none">• true: 为自动支付，默认该方式。• false: 为手动支付。

表 4-74 MysqlResizeFlavor

参数	是否必选	参数类型	描述
spec_code	是	String	规格码。

响应参数

状态码：200

表 4-75 响应 Body 参数

参数	参数类型	描述
job_id	String	规格变更的任务ID，仅变更按需实例时会返回该参数。
order_id	String	订单ID，仅变更包年/包月实例时会返回该参数。

状态码：400

表 4-76 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-77 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

变更实例的内存规格为4U32GB。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/
ba62a0b83a1b42bfab275829d86ac0fdin07/action

{
  "resize_flavor" : {
    "spec_code" : "gaussdb.mysql.xlarge.arm.4"
  }
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

变更实例的内存规格为4U32GB。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ChangeGaussMySQLInstanceSpecificationSolution {

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

ChangeGaussMySQLInstanceSpecificationRequest request = new
ChangeGaussMySQLInstanceSpecificationRequest();
request.withInstanceId("{instance_id}");
MySQLChangeSpecificationRequest body = new MySQLChangeSpecificationRequest();
MySQLResizeFlavor resizeFlavorbody = new MySQLResizeFlavor();
resizeFlavorbody.withSpecCode("gaussdb.mysql.xlarge.arm.4");
body.withResizeFlavor(resizeFlavorbody);
request.withBody(body);
try {
    ChangeGaussMySQLInstanceSpecificationResponse response =
client.changeGaussMySQLInstanceSpecification(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

变更实例的内存规格为4U32GB。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

```
resizeFlavorbody = MysqlResizeFlavor(
    spec_code="gaussdb.mysql.xlarge.arm.4"
)
request.body = MysqlChangeSpecificationRequest(
    resize_flavor=resizeFlavorbody
)
response = client.change_gauss_my_sql_instance_specification(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

变更实例的内存规格为4U32GB。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ChangeGaussMySQLInstanceSpecificationRequest{
        request.InstanceId = "{instance_id}"
        resizeFlavorbody := &model.MysqlResizeFlavor{
            SpecCode: "gaussdb.mysql.xlarge.arm.4",
        }
        request.Body = &model.MysqlChangeSpecificationRequest{
            ResizeFlavor: resizeFlavorbody,
        }
        response, err := client.ChangeGaussMySQLInstanceSpecification(request)
        if err == nil {
            fmt.Printf("%+v\n", response)
        } else {
            fmt.Println(err)
        }
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.10 查询专属资源池列表

功能介绍

获取专属资源池列表，包括用户开通的所有专属资源池信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/dedicated-resources

表 4-78 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-79 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-80 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-81 响应 Body 参数

参数	参数类型	描述
resources	Array of DedicatedResource objects	专属资源池信息。
total_count	Integer	专属资源池数量。

表 4-82 DedicatedResource

参数	参数类型	描述
id	String	专属资源池ID。
resource_name	String	专属资源池名称。
engine_name	String	数据库引擎名称。
architecture	String	CPU架构
status	String	专属资源池状态。 取值范围： <ul style="list-style-type: none">• NORMAL：正常。• BUILDING：构建中。• EXTENDING：扩容中。• DELETED：已删除。
capacity	DedicatedResourceCapacity object	专属资源池容量信息。
availability_zone	Array of strings	专属资源池可用区信息。

表 4-83 DedicatedResourceCapacity

参数	参数类型	描述
ram	Integer	内存大小，单位GB。
volume	Long	磁盘容量，单位GB。
vcpus	Integer	CPU核数。

状态码：400

表 4-84 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-85 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询专属资源池列表。

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

响应示例

状态码：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" ]
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListGaussMySQLDedicatedResourcesSolution {

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListGaussMySQLDedicatedResourcesRequest request = new
ListGaussMySQLDedicatedResourcesRequest();
try {
    ListGaussMySQLDedicatedResourcesResponse response =
client.listGaussMySQLDedicatedResources(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListGaussMySQLDedicatedResourcesRequest()
        response = client.list_gauss_my_sql_dedicated_resources(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.11 查询专属资源信息详情

功能介绍

查询专属资源信息详情。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-86 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
dedicated_resource_id	是	String	专属资源池ID。 获取方法参见 查询专属资源信息详情 。

请求参数

表 4-87 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-88 响应 Body 参数

参数	参数类型	描述
id	String	专属资源池ID。
resource_name	String	专属资源池名称。
engine_name	String	数据库引擎名称。
availability_zone_ids	Array of strings	可用区。
architecture	String	资源规格类型。
status	String	专属资源池状态。
dedicated_compute_info	DedicatedComputeInfo object	计算资源信息。
dedicated_storage_info	DedicatedStorageInfo object	存储资源信息。

表 4-89 DedicatedComputeInfo

参数	参数类型	描述
vcpus_total	Integer	专属资源池中CPU总数。
vcpus_used	Integer	专属资源池已使用的CPU数。
ram_total	Integer	专属资源池计算内存大小, 单位GB。
ram_used	Integer	专属资源池已使用的计算内存大小, 单位GB。
spec_code	String	专属资源池计算资源规格码。
host_num	Integer	专属资源池计算主机数量。

表 4-90 DedicatedStorageInfo

参数	参数类型	描述
spec_code	String	专属资源池存储资源规格码。
host_num	Integer	专属资源池存储主机数量。

状态码: 400

表 4-91 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-92 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询专属资源信息详情。

```
GET https://{endpoint}/v3/058497e1c100d3eb2f3cc01160616934/dedicated-resource/e289fda5-a065-4324-8751-cff68be6f48e
```

响应示例

状态码：200

Success.

```
{
  "id": "e289fda5-a065-4324-8751-cff68be6f48e",
  "resource_name": "test_dcc",
  "engine_name": "gaussdb-mysql",
  "availability_zone_ids": [ "az1xahz", "az2xahz" ],
  "architecture": "ARM",
  "status": "normal",
  "dedicated_compute_info": {
    "vcpus_total": 128,
    "vcpus_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
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowDedicatedResourceInfoSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowDedicatedResourceInfoRequest request = new ShowDedicatedResourceInfoRequest();
        request.withDedicatedResourceId("{dedicated_resource_id}");
        try {
            ShowDedicatedResourceInfoResponse response = client.showDedicatedResourceInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = ShowDedicatedResourceInfoRequest()
    request.dedicated_resource_id = "{dedicated_resource_id}"
    response = client.show_dedicated_resource_info(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.12 设置实例秒级监控

功能介绍

设置实例秒级监控，包括1秒监控和5秒监控。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-93 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-94 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-95 请求 Body 参数

参数	是否必选	参数类型	描述
monitor_switch	是	Boolean	实例秒级监控开关。 <ul style="list-style-type: none">true: 开启。false: 关闭。
period	否	Integer	采集周期，仅在monitor_switch为true时生效。默认为5s。monitor_switch为false时，不传该参数。取值： <ul style="list-style-type: none">1: 采集周期为1s。5: 采集周期为5s。

响应参数

状态码：200

表 4-96 响应 Body 参数

参数	参数类型	描述
job_id	String	修改秒级监控的任务流ID。

状态码：400

表 4-97 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-98 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 修改实例秒级监控开关及频率，开启秒级监控，采集周期为1s。

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

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

- 修改实例秒级监控开关，关闭秒级监控。

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

```
{  
  "monitor_switch": false  
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

- 修改实例秒级监控开关及频率，开启秒级监控，采集周期为1s。

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateInstanceMonitorSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateInstanceMonitorRequest request = new UpdateInstanceMonitorRequest();
        request.withInstanceId("{instance_id}");
        TaurusModifyInstanceMonitorRequestBody body = new
        TaurusModifyInstanceMonitorRequestBody();
        body.withPeriod(TaurusModifyInstanceMonitorRequestBody.PeriodEnum.NUMBER_1);
        body.withMonitorSwitch(true);
        request.withBody(body);
        try {
            UpdateInstanceMonitorResponse response = client.updateInstanceMonitor(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- 修改实例秒级监控开关，关闭秒级监控。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateInstanceMonitorSolution {
```

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

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

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();

    UpdateInstanceMonitorRequest request = new UpdateInstanceMonitorRequest();
    request.withInstanceId("{instance_id}");
    TaurusModifyInstanceMonitorRequestBody body = new
    TaurusModifyInstanceMonitorRequestBody();
    body.withMonitorSwitch(false);
    request.withBody(body);
    try {
        UpdateInstanceMonitorResponse response = client.updateInstanceMonitor(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

- 修改实例秒级监控开关及频率，开启秒级监控，采集周期为1s。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
```

```
.with_credentials(credentials) \  
.with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
.build()  
  
try:  
    request = UpdateInstanceMonitorRequest()  
    request.instance_id = "{instance_id}"  
    request.body = TaurusModifyInstanceMonitorRequestBody(  
        period=1,  
        monitor_switch=True  
    )  
    response = client.update_instance_monitor(request)  
    print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

- 修改实例秒级监控开关，关闭秒级监控。

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
    # environment variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before  
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
    # environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = UpdateInstanceMonitorRequest()  
        request.instance_id = "{instance_id}"  
        request.body = TaurusModifyInstanceMonitorRequestBody(  
            monitor_switch=False  
        )  
        response = client.update_instance_monitor(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

- 修改实例秒级监控开关及频率，开启秒级监控，采集周期为1s。

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
```



```
gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceMonitorRequest{}
    request.InstanceId = "{instance_id}"
    periodTaurusModifyInstanceMonitorRequestBody:=
    model.GetTaurusModifyInstanceMonitorRequestBodyPeriodEnum().E_1
    request.Body = &model.TaurusModifyInstanceMonitorRequestBody{
        Period: &periodTaurusModifyInstanceMonitorRequestBody,
        MonitorSwitch: true,
    }
    response, err := client.UpdateInstanceMonitor(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 修改实例秒级监控开关，关闭秒级监控。

```
package main

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

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

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

```
Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateInstanceMonitorRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.TaurusModifyInstanceMonitorRequestBody{
    MonitorSwitch: false,
}
response, err := client.UpdateInstanceMonitor(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.13 查询实例秒级监控

功能介绍

查询实例秒级监控信息。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-99 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-100 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-101 响应 Body 参数

参数	参数类型	描述
monitor_switch	Boolean	实例秒级监控开关。 <ul style="list-style-type: none">true：表示开启。false：表示关闭。
period	Integer	采集周期，仅在monitor_switch为true时返回。 <ul style="list-style-type: none">1：采集周期为1s。5：采集周期为5s。

状态码：400

表 4-102 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-103 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例秒级监控状态。

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowInstanceMonitorExtendSolution {  
    public static void main(String[] args) {
```

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

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

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowInstanceMonitorExtendRequest()
        request.instance_id = "{instance_id}"
        response = client.show_instance_monitor_extend(request)
        print(response)
```

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.14 节点重启

功能介绍

节点重启。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-104 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
node_id	是	String	节点ID。

请求参数

表 4-105 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-106 请求 Body 参数

参数	是否必选	参数类型	描述
delay	否	Boolean	实例节点是否延迟重启。默认 false，立即重启。 <ul style="list-style-type: none">• true: 延迟重启，实例节点将在运维时间窗内自动重启。• false: 立即重启。

响应参数

状态码：200

表 4-107 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-108 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-109 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重启实例节点。

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



```
"delay" : false  
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

重启实例节点。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class RestartGaussMySQLNodeSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        RestartGaussMySQLNodeRequest request = new RestartGaussMySQLNodeRequest();  
        request.withInstanceId("{instance_id}");  
        request.withNodeId("{node_id}");  
        RestartNodeRequest body = new RestartNodeRequest();  
        body.withDelay(false);  
        request.withBody(body);  
        try {  
            RestartGaussMySQLNodeResponse response = client.restartGaussMySQLNode(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {
```

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

Python

重启实例节点。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestartGaussMySQLNodeRequest()
        request.instance_id = "{instance_id}"
        request.node_id = "{node_id}"
        request.body = RestartNodeRequest(
            delay=False
        )
        response = client.restart_gauss_my_sql_node(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

重启实例节点。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestartGaussMySQLNodeRequest{}
    request.InstanceId = "{instance_id}"
    request.NodeId = "{node_id}"
    delayRestartNodeRequest := false
    request.Body = &model.RestartNodeRequest{
        Delay: &delayRestartNodeRequest,
    }
    response, err := client.RestartGaussMySQLNode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.15 内核版本升级

功能介绍

内核版本升级。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-110 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-111 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-112 请求 Body 参数

参数	是否必选	参数类型	描述
delay	否	Boolean	实例是否延迟升级，默认 false，立即升级。 取值范围： <ul style="list-style-type: none">• true: 延迟升级，实例将在运维时间窗内自动升级。• false: 立即升级。

响应参数

状态码：200

表 4-113 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-114 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-115 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

升级内核小版本，升级方式为立即升级。

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

```
{  
  "delay": false  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id": "e0fbfc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

升级内核小版本，升级方式为立即升级。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpgradeGaussMySQLInstanceDatabaseSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
  
        UpgradeGaussMySQLInstanceDatabaseRequest request = new  
        UpgradeGaussMySQLInstanceDatabaseRequest();  
        request.withInstanceId("{instance_id}");  
        UpgradeDatabaseRequest body = new UpgradeDatabaseRequest();  
        body.withDelay(false);  
        request.withBody(body);  
        try {  
            UpgradeGaussMySQLInstanceDatabaseResponse response =  
            client.upgradeGaussMySQLInstanceDatabase(request);  
            System.out.println(response.toString());  
        }  
    }  
}
```

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

Python

升级内核小版本，升级方式为立即升级。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpgradeGaussMySQLInstanceDatabaseRequest()
        request.instance_id = "{instance_id}"
        request.body = UpgradeDatabaseRequest(
            delay=False
        )
        response = client.upgrade_gauss_my_sql_instance_database(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

升级内核小版本，升级方式为立即升级。

```
package main

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

```
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpgradeGaussMySQLInstanceDatabaseRequest{}
    request.InstanceId = "{instance_id}"
    delayUpgradeDatabaseRequest := false
    request.Body = &model.UpgradeDatabaseRequest{
        Delay: &delayUpgradeDatabaseRequest,
    }
    response, err := client.UpgradeGaussMySQLInstanceDatabase(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.16 开关 SSL

功能介绍

为实例设置SSL数据加密。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-116 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-117 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-118 请求 Body 参数

参数	是否必选	参数类型	描述
ssl_option	是	Boolean	SSL数据加密开关设置。 取值范围： <ul style="list-style-type: none">• true: 开启SSL数据加密。• false: 关闭SSL数据加密。

响应参数

状态码：200

表 4-119 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-120 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-121 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启实例SSL数据加密。

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

```
"ssl_option" : true  
}
```

- 关闭实例SSL数据加密。

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

```
{  
  "ssl_option" : false  
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

- 开启实例SSL数据加密。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class SwitchGaussMySQLInstanceSslSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before  
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
        // environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        SwitchGaussMySQLInstanceSslRequest request = new SwitchGaussMySQLInstanceSslRequest();  
        request.withInstanceId("{instance_id}");  
        SwitchSSLRequest body = new SwitchSSLRequest();  
        body.withSslOption(true);  
    }  
}
```

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

- 关闭实例SSL数据加密。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SwitchGaussMySQLInstanceSslSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SwitchGaussMySQLInstanceSslRequest request = new SwitchGaussMySQLInstanceSslRequest();
        request.withInstanceId("{instance_id}");
        SwitchSSLRequest body = new SwitchSSLRequest();
        body.withSslOption(false);
        request.withBody(body);
        try {
            SwitchGaussMySQLInstanceSslResponse response =
client.switchGaussMySQLInstanceSsl(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
        }
    }
}
```

```
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

- 开启实例SSL数据加密。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = SwitchGaussMySQLInstanceSslRequest()
        request.instance_id = "{instance_id}"
        request.body = SwitchSSLRequest(
            ssl_option=True
        )
        response = client.switch_gauss_my_sql_instance_ssl(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 关闭实例SSL数据加密。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

```
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = SwitchGaussMySQLInstanceSslRequest()
    request.instance_id = "{instance_id}"
    request.body = SwitchSSLRequest(
        ssl_option=False
    )
    response = client.switch_gauss_my_sql_instance_ssl(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- 开启实例SSL数据加密。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchGaussMySQLInstanceSslRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.SwitchSslRequest{
        SslOption: true,
    }
    response, err := client.SwitchGaussMySQLInstanceSsl(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 关闭实例SSL数据加密。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchGaussMySQLInstanceSslRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.SwitchSslRequest{
        SslOption: false,
    }
    response, err := client.SwitchGaussMySQLInstanceSsl(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.17 绑定弹性公网 IP 地址

功能介绍

实例绑定弹性公网IP地址，供外网连接使用。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-122 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-123 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-124 请求 Body 参数

参数	是否必选	参数类型	描述
public_ip	是	String	待绑定的弹性公网IP地址。
public_ip_id	是	String	弹性公网IP地址对应的ID。

响应参数

状态码：200

表 4-125 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-126 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-127 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

为实例绑定弹性公网IP地址。

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

```
{  
  "public_ip" : "10.145.51.214",  
  "public_ip_id" : "8403e9cd-a7fa-4288-8b15-c7ceac1etest"  
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

为实例绑定弹性公网IP地址。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateGaussMySQLInstanceEipSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateGaussMySQLInstanceEipRequest request = new UpdateGaussMySQLInstanceEipRequest();
        request.withInstanceId("{instance_id}");
        ModifyBindEipRequest body = new ModifyBindEipRequest();
        body.withPublicIpId("8403e9cd-a7fa-4288-8b15-c7ceac1etest");
        body.withPublicIp("10.145.51.214");
        request.withBody(body);
        try {
            UpdateGaussMySQLInstanceEipResponse response = client.updateGaussMySQLInstanceEip(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
        }
    }
}
```

```
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

为实例绑定弹性公网IP地址。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateGaussMySQLInstanceEipRequest()
        request.instance_id = "{instance_id}"
        request.body = ModifyBindEipRequest(
            public_ip_id="8403e9cd-a7fa-4288-8b15-c7ceac1etest",
            public_ip="10.145.51.214"
        )
        response = client.update_gauss_my_sql_instance_eip(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

为实例绑定弹性公网IP地址。

```
package main

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

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateGaussMySQLInstanceEipRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.ModifyBindEipRequest{
    PublicIpId: "8403e9cd-a7fa-4288-8b15-c7ceac1etest",
    PublicIp: "10.145.51.214",
}
response, err := client.UpdateGaussMySQLInstanceEip(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.18 解绑弹性公网 IP 地址

功能介绍

实例解绑弹性公网IP地址。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-128 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-129 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-130 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-131 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-132 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

解绑实例已绑定的弹性公网IP地址。

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CancelGaussMySQLInstanceEipSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

CancelGaussMySQLInstanceEipRequest request = new CancelGaussMySQLInstanceEipRequest();
request.withInstanceId("{instance_id}");
try {
    CancelGaussMySQLInstanceEipResponse response = client.cancelGaussMySQLInstanceEip(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CancelGaussMySQLInstanceEipRequest()
        request.instance_id = "{instance_id}"
        response = client.cancel_gauss_my_sql_instance_eip(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.19 手动主备倒换

功能介绍

用户手动进行主备倒换。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-133 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-134 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-135 请求 Body 参数

参数	是否必选	参数类型	描述
node_id	是	String	只读节点ID，倒换后为主节点。

响应参数

状态码：200

表 4-136 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-137 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-138 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

手动进行主备倒换。

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

手动进行主备倒换。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class InvokeGaussMySQLInstanceSwitchOverSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        InvokeGaussMySQLInstanceSwitchOverRequest request = new
        InvokeGaussMySQLInstanceSwitchOverRequest();
        request.withInstanceId("{instance_id}");
        TaurusSwitchoverRequest body = new TaurusSwitchoverRequest();
        body.withNodeId("1801a615b52b4a5697cfe385f6affbf4no07");
        request.withBody(body);
        try {
            InvokeGaussMySQLInstanceSwitchOverResponse response =
            client.invokeGaussMySQLInstanceSwitchOver(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

手动进行主备倒换。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = InvokeGaussMySQLInstanceSwitchOverRequest()
        request.instance_id = "{instance_id}"
        request.body = TaurusSwitchoverRequest(
            node_id="1801a615b52b4a5697cfe385f6affbf4no07"
        )
        response = client.invoke_gauss_my_sql_instance_switch_over(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

手动进行主备倒换。

```
package main

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

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.InvokeGaussMySQLInstanceSwitchOverRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.TaurusSwitchoverRequest{
    NodeId: "1801a615b52b4a5697cfe385f6affbf4no07",
}
response, err := client.InvokeGaussMySQLInstanceSwitchOver(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.20 设置可维护时间段

功能介绍

设置可维护时间段。建议将可维护时间段设置在业务低峰期，避免业务在维护过程中异常中断。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-139 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-140 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-141 请求 Body 参数

参数	是否必选	参数类型	描述
start_time	是	String	维护起始时间，UTC时间。
end_time	是	String	维护结束时间，UTC时间。 说明：TaurusDB数据库的结束时间和开始时间必须为整点时间，且相隔四个小时。

响应参数

状态码：400

表 4-142 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-143 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置可维护时间段的起止时间是22:00~02:00。

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/  
096c0fc43e804757b59946b80dc27f8bin07/ops-window  
{  
  "start_time": "22:00",  
  "end_time": "02:00"  
}
```

响应示例

状态码：200

Success.

```
{}
```

SDK 代码示例

SDK代码示例如下。

Java

设置可维护时间段的起止时间是22:00~02:00。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;
```

```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateGaussMySQLInstanceOpsWindowSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateGaussMySQLInstanceOpsWindowRequest request = new
        UpdateGaussMySQLInstanceOpsWindowRequest();
        request.withInstanceId("{instance_id}");
        ModifyOpsWindow body = new ModifyOpsWindow();
        body.withEndTime("02:00");
        body.withStartTime("22:00");
        request.withBody(body);
        try {
            UpdateGaussMySQLInstanceOpsWindowResponse response =
            client.updateGaussMySQLInstanceOpsWindow(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

设置可维护时间段的起止时间是22:00~02:00。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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



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

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = UpdateGaussMySqlInstanceOpsWindowRequest()
    request.instance_id = "{instance_id}"
    request.body = ModifyOpsWindow(
        end_time="02:00",
        start_time="22:00"
    )
    response = client.update_gauss_my_sql_instance_ops_window(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

设置可维护时间段的起止时间是22:00~02:00。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySqlInstanceOpsWindowRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ModifyOpsWindow{
        EndTime: "02:00",
        StartTime: "22:00",
    }
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.21 修改安全组

功能介绍

修改指定实例安全组。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-144 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-145 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

表 4-146 请求 Body 参数

参数	是否必选	参数类型	描述
security_group_id	是	String	安全组ID。

响应参数

状态码：200

表 4-147 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-148 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-149 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例的安全组。

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

响应示例

状态码：200

Success.

```
{
  "job_id": "e0fbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改实例的安全组。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateGaussMySQLInstanceSecurityGroupSolution {

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

UpdateGaussMySQLInstanceSecurityGroupRequest request = new
UpdateGaussMySQLInstanceSecurityGroupRequest();
request.withInstanceId("{instance_id}");
ModifySecurityGroupRequest body = new ModifySecurityGroupRequest();
body.withSecurityGroupId("054f55b5-946e-4761-a1e3-3be6892827c1");
request.withBody(body);
try {
    UpdateGaussMySQLInstanceSecurityGroupResponse response =
client.updateGaussMySQLInstanceSecurityGroup(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改实例的安全组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateGaussMySQLInstanceSecurityGroupRequest()
        request.instance_id = "{instance_id}"
        request.body = ModifySecurityGroupRequest(
```

```
        security_group_id="054f55b5-946e-4761-a1e3-3be6892827c1"
    )
    response = client.update_gauss_my_sql_instance_security_group(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改实例的安全组。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySqlInstanceSecurityGroupRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ModifySecurityGroupRequest{
        SecurityGroupId: "054f55b5-946e-4761-a1e3-3be6892827c1",
    }
    response, err := client.UpdateGaussMySqlInstanceSecurityGroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.22 修改内网地址

功能介绍

修改实例内网地址。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-150 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-151 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-152 请求 Body 参数

参数	是否必选	参数类型	描述
internal_ip	是	String	内网IP地址。

响应参数

状态码：200

表 4-153 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-154 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-155 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例的内网地址。

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/  
096c0fc43e804757b59946b80dc27f8bin07/internal-ip  
  
{  
  "internal_ip" : "192.168.0.213"  
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

修改实例的内网地址。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateGaussMySQLInstanceInternalIpSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";
```

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateGaussMySQLInstanceInternalIpRequest request = new
UpdateGaussMySQLInstanceInternalIpRequest();
request.withInstanceId("{instance_id}");
ModifyInternalIpRequest body = new ModifyInternalIpRequest();
body.withInternalIp("192.168.0.213");
request.withBody(body);
try {
    UpdateGaussMySQLInstanceInternalIpResponse response =
client.updateGaussMySQLInstanceInternalIp(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改实例的内网地址。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateGaussMySQLInstanceInternalIpRequest()
        request.instance_id = "{instance_id}"
        request.body = ModifyInternalIpRequest(
            internal_ip="192.168.0.213"
        )
        response = client.update_gauss_my_sql_instance_internal_ip(request)
```

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

Go

修改实例的内网地址。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySQLInstanceInternalIpRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ModifyInternalIpRequest{
        InternalIp: "192.168.0.213",
    }
    response, err := client.UpdateGaussMySQLInstanceInternalIp(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.23 修改实例端口

功能介绍

修改实例数据库端口。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-156 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-157 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-158 请求 Body 参数

参数	是否必选	参数类型	描述
port	是	Integer	端口号。 TaurusDB端口号范围：大于等于1024，小于等于65535，不包含端口5342-5345、12017、20000、20201、20202、33062、33071。

响应参数

状态码：200

表 4-159 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-160 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-161 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例端口为8836。

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

```
{  
  "port" : 8836  
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

修改实例端口为8836。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateGaussMySQLInstancePortSolution {
```

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

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

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    UpdateGaussMySQLInstancePortRequest request = new UpdateGaussMySQLInstancePortRequest();
    request.withInstanceId("{instance_id}");
    ModifyPortRequest body = new ModifyPortRequest();
    body.withPort(8836);
    request.withBody(body);
    try {
        UpdateGaussMySQLInstancePortResponse response = client.updateGaussMySQLInstancePort(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

修改实例端口为8836。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```

```
.build()

try:
    request = UpdateGaussMySQLInstancePortRequest()
    request.instance_id = "{instance_id}"
    request.body = ModifyPortRequest(
        port=8836
    )
    response = client.update_gauss_my_sql_instance_port(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改实例端口为8836。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySQLInstancePortRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ModifyPortRequest{
        Port: int32(8836),
    }
    response, err := client.UpdateGaussMySQLInstancePort(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```


更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.24 修改实例备注

功能介绍

修改实例备注。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-162 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-163 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-164 请求 Body 参数

参数	是否必选	参数类型	描述
alias	是	String	实例备注。 长度可在0~64个字符之间，由字母、数字、汉字、英文句号、下划线、中划线组成。

响应参数

状态码：400

表 4-165 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-166 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

将实例备注修改为“Test_alias”。

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

```
{  
  "alias": "Test_alias"  
}
```

响应示例

状态码：200

Success.

```
{ }
```

SDK 代码示例

SDK代码示例如下。

Java

将实例备注修改为“Test_alias”。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateGaussMySQLInstanceAliasSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()
```

```
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
UpdateGaussMySqlInstanceAliasRequest request = new UpdateGaussMySqlInstanceAliasRequest();
request.withInstanceld("{instance_id}");
ModifyAliasRequest body = new ModifyAliasRequest();
body.withAlias("Test_alias");
request.withBody(body);
try {
    UpdateGaussMySqlInstanceAliasResponse response =
client.updateGaussMySqlInstanceAlias(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
}
```

Python

将实例备注修改为“Test_alias”。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateGaussMySqlInstanceAliasRequest()
        request.instance_id = "{instance_id}"
        request.body = ModifyAliasRequest(
            alias="Test_alias"
        )
        response = client.update_gauss_my_sql_instance_alias(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

将实例备注修改为“Test_alias”。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySQLInstanceAliasRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ModifyAliasRequest{
        Alias: "Test_alias",
    }
    response, err := client.UpdateGaussMySQLInstanceAlias(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.25 申请内网域名

功能介绍

申请内网域名。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-167 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-168 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-169 请求 Body 参数

参数	是否必选	参数类型	描述
dns_type	是	String	域名类型，当前只支持 private。

响应参数

状态码：200

表 4-170 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-171 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-172 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

申请内网域名。

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

```
"dns_type" : "private"  
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

申请内网域名。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class CreateGaussMysqlDnsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        CreateGaussMysqlDnsRequest request = new CreateGaussMysqlDnsRequest();  
        request.withInstanceId("{instance_id}");  
        CreateDnsNameReq body = new CreateDnsNameReq();  
        body.withDnsType("private");  
        request.withBody(body);  
        try {  
            CreateGaussMysqlDnsResponse response = client.createGaussMysqlDns(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        }  
    }  
}
```



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

Python

申请内网域名。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateGaussMySQLDnsRequest()
        request.instance_id = "{instance_id}"
        request.body = CreateDnsNameReq(
            dns_type="private"
        )
        response = client.create_gauss_mysql_dns(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

申请内网域名。

```
package main

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

func main() {
```

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

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CreateGaussMySQLDnsRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.CreateDnsNameReq{
    DnsType: "private",
}
response, err := client.CreateGaussMySQLDns(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.26 修改内网域名

功能介绍

修改内网域名。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-173 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-174 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-175 请求 Body 参数

参数	是否必选	参数类型	描述
dns_name	是	String	新域名的前缀，取值范围如下： 8~63个字符之间，可以包含小写字母、数字，不能包含其他特殊字符。

响应参数

状态码：200

表 4-176 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-177 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-178 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改内网域名

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

修改内网域名

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ModifyGaussMySQLDnsSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ModifyGaussMySQLDnsRequest request = new ModifyGaussMySQLDnsRequest();
        request.withInstanceId("{instance_id}");
        ModifyDnsNameReq body = new ModifyDnsNameReq();
        body.withDnsName("testmodifydnsname");
        request.withBody(body);
        try {
            ModifyGaussMySQLDnsResponse response = client.modifyGaussMySQLDns(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

修改内网域名

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ModifyGaussMysqlDnsRequest()
        request.instance_id = "{instance_id}"
        request.body = ModifyDnsNameReq(
            dns_name="testmodifydnsname"
        )
        response = client.modify_gauss_mysql_dns(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

修改内网域名

```
package main

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

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

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

```
client := gaussdb.NewGaussDBClient(  
    gaussdb.GaussDBClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.ModifyGaussMysqlDnsRequest{  
    request.InstanceId = "{instance_id}"  
    request.Body = &model.ModifyDnsNameReq{  
        DnsName: "testmodifydnsname",  
    }  
}  
response, err := client.ModifyGaussMysqlDns(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.27 查询内核版本信息

功能介绍

查询内核版本信息。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-179 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-180 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-181 响应 Body 参数

参数	参数类型	描述
datastore	InstanceDatabaseVersionInfo object	数据库版本信息。
upgrade_flag	Boolean	是否可升级。 <ul style="list-style-type: none"> true：是。 false：否。

表 4-182 InstanceDatabaseVersionInfo

参数	参数类型	描述
current_version	String	当前数据库版本。
current_kernel_version	String	当前数据库内核版本。
latest_version	String	最新数据库版本。
latest_kernel_version	String	最新数据库内核版本。

状态码: 400

表 4-183 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-184 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询内核版本信息。

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

响应示例

状态码: 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  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowInstanceDatabaseVersionSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowInstanceDatabaseVersionRequest request = new ShowInstanceDatabaseVersionRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ShowInstanceDatabaseVersionResponse response = client.showInstanceDatabaseVersion(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowInstanceDatabaseVersionRequest{}
    request.InstanceId = "{instance_id}"
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.28 设置自动变配

功能介绍

设置自动变配。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-185 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID, 严格匹配UUID规则。

请求参数

表 4-186 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围: <ul style="list-style-type: none">en-uszh-cn

表 4-187 请求 Body 参数

参数	是否必选	参数类型	描述
status	是	String	自动变配开关状态。 取值: <ul style="list-style-type: none">ON: 开启。OFF: 关闭。
scaling_strategy	是	ScalingStrategyReqInfo object	自动变配策略。
monitor_cycle	否	Integer	监测周期(单位: 秒)。 在整个观测窗口期内, 若CPU平均使用率大于等于设定值, 则在观测窗口结束后, 进行扩容。 取值范围: 300、600、900、1800。 status为ON时必填。

参数	是否必选	参数类型	描述
silence_cycle	否	Integer	静默周期（单位：秒）。 两次自动扩容或自动回缩的最小间隔时间。 取值范围：300、600、1800、3600、7200、10800、86400、604800。 status为ON时必填。
enlarge_threshold	否	Integer	CPU平均使用率（百分比数值）。 取值范围：50-100。 status为ON时必填。
max_flavor	否	String	扩容规格上限。开启扩缩规格时必填。
reduce_enabled	否	Boolean	是否开启自动回缩。开启自动变配时必填。 <ul style="list-style-type: none">• true: 是。• false: 否。
max_read_only_count	否	Integer	只读节点数量上限。开启增删只读节点时必填。
read_only_weight	否	Integer	只读节点读写分离权重。开启增删只读节点时必填。

表 4-188 ScalingStrategyReqInfo

参数	是否必选	参数类型	描述
flavor_switch	是	String	扩缩规格开关。 <ul style="list-style-type: none">• ON: 开启。• OFF: 关闭。
read_only_switch	是	String	增删只读节点开关。自动增删只读节点功能需要先 开启数据库代理 ，且只能有一个代理。 <ul style="list-style-type: none">• ON: 开启。• OFF: 关闭。

响应参数

状态码：200

表 4-189 响应 Body 参数

参数	参数类型	描述
instance_id	String	实例ID。
instance_name	String	实例名称。
switch_status	AutoScalingSwitchStatus object	开关状态。

表 4-190 AutoScalingSwitchStatus

参数	参数类型	描述
scaling_switch	String	自动变配开关状态。 取值： <ul style="list-style-type: none"> ON: 开启。 OFF: 关闭。
flavor_switch	String	扩缩规格开关状态。 取值： <ul style="list-style-type: none"> ON: 开启。 OFF: 关闭。
read_only_switch	String	增删只读节点开关状态。 取值： <ul style="list-style-type: none"> ON: 开启。 OFF: 关闭。

状态码：400

表 4-191 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-192 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置自动变配。

```
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"  
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

设置自动变配。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```



```
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateAutoScalingPolicySolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateAutoScalingPolicyRequest request = new UpdateAutoScalingPolicyRequest();
        request.withInstanceId("{instance_id}");
        UpdateAutoScalingPolicyRequestBody body = new UpdateAutoScalingPolicyRequestBody();
        ScalingStrategyReqInfo scalingStrategybody = new ScalingStrategyReqInfo();
        scalingStrategybody.withFlavorSwitch("ON")
            .withReadOnlySwitch("ON");
        body.withScalingStrategy(scalingStrategybody);
        body.withReadOnlyWeight(10);
        body.withMaxReadOnlyCount(2);
        body.withReduceEnabled(false);
        body.withMaxFlavor("gaussdb.mysql.large.x86.4");
        body.withEnlargeThreshold(50);
        body.withSilenceCycle(300);
        body.withMonitorCycle(300);
        body.withStatus("ON");
        request.withBody(body);
        try {
            UpdateAutoScalingPolicyResponse response = client.updateAutoScalingPolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

设置自动变配。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
```

```
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateAutoScalingPolicyRequest()
        request.instance_id = "{instance_id}"
        scalingStrategybody = ScalingStrategyReqInfo(
            flavor_switch="ON",
            read_only_switch="ON"
        )
        request.body = UpdateAutoScalingPolicyRequestBody(
            scaling_strategy=scalingStrategybody,
            read_only_weight=10,
            max_read_only_count=2,
            reduce_enabled=False,
            max_flavor="gaussdb.mysql.large.x86.4",
            enlarge_threshold=50,
            silence_cycle=300,
            monitor_cycle=300,
            status="ON"
        )
        response = client.update_auto_scaling_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置自动变配。

```
package main

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

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

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateAutoScalingPolicyRequest{}
request.InstanceId = "{instance_id}"
scalingStrategybody := &model.ScalingStrategyReqInfo{
    FlavorSwitch: "ON",
    ReadOnlySwitch: "ON",
}
readOnlyWeightUpdateAutoScalingPolicyRequestBody:= int32(10)
maxReadOnlyCountUpdateAutoScalingPolicyRequestBody:= int32(2)
reduceEnabledUpdateAutoScalingPolicyRequestBody:= false
maxFlavorUpdateAutoScalingPolicyRequestBody:= "gaussdb.mysql.large.x86.4"
enlargeThresholdUpdateAutoScalingPolicyRequestBody:= int32(50)
silenceCycleUpdateAutoScalingPolicyRequestBody:= int32(300)
monitorCycleUpdateAutoScalingPolicyRequestBody:= int32(300)
request.Body = &model.UpdateAutoScalingPolicyRequestBody{
    ScalingStrategy: scalingStrategybody,
    ReadOnlyWeight: &readOnlyWeightUpdateAutoScalingPolicyRequestBody,
    MaxReadOnlyCount: &maxReadOnlyCountUpdateAutoScalingPolicyRequestBody,
    ReduceEnabled: &reduceEnabledUpdateAutoScalingPolicyRequestBody,
    MaxFlavor: &maxFlavorUpdateAutoScalingPolicyRequestBody,
    EnlargeThreshold: &enlargeThresholdUpdateAutoScalingPolicyRequestBody,
    SilenceCycle: &silenceCycleUpdateAutoScalingPolicyRequestBody,
    MonitorCycle: &monitorCycleUpdateAutoScalingPolicyRequestBody,
    Status: "ON",
}
response, err := client.UpdateAutoScalingPolicy(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.29 查询自动变配

功能介绍

查询自动变配。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-193 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释： 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，且长度为32个字符。 默认值： 不涉及。
instance_id	是	String	参数解释： 实例ID，此参数是实例的唯一标识。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，后缀为in07，长度为36个字符。 默认取值： 不涉及。

请求参数

表 4-194 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释： 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制： 不涉及。 取值范围： 不涉及。 默认值： 不涉及。
Content-Type	是	String	参数解释： 内容类型。 约束限制： 不涉及。 取值范围： application/json。 默认值： 不涉及。
X-Language	否	String	参数解释： 请求语言类型。 约束限制： 不涉及。 取值范围： <ul style="list-style-type: none">• en-us• zh-cn 默认值： en-us。

响应参数

状态码：200

表 4-195 响应 Body 参数

参数	参数类型	描述
id	String	参数解释: 自动变配策略ID。 取值范围: 不涉及。
instance_id	String	参数解释: 实例ID。 取值范围: 只能由英文字母、数字组成, 后缀为in07, 长度为36个字符。
instance_name	String	参数解释: 实例名称。 取值范围: 最小为4个字符, 最大为64个字符且不超过64个字节(注意: 一个中文字符占用3个字节), 必须以字母或中文开头, 区分大小写, 可以包含字母、数字、中划线、下划线或中文, 不能包含其他特殊字符。
status	String	参数解释: 自动变配开关状态。 取值范围: <ul style="list-style-type: none">• ON: 已开启。• OFF: 已关闭。
monitor_cycle	Integer	参数解释: 监测周期(单位: 秒)。 在整个观测窗口期内, 若CPU平均使用率大于等于设定值, 则在观测窗口结束后, 进行扩容。 取值范围: <ul style="list-style-type: none">• 300• 600• 900• 1800

参数	参数类型	描述
silence_cycle	Integer	<p>参数解释: 静默周期 (单位: 秒)。 两次自动扩容或自动回缩的最小间隔时间。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • 300 • 600 • 1800 • 3600 • 7200 • 10800 • 86400 • 604800
enlarge_threshold	Integer	<p>参数解释: 扩容阈值 (百分比数值), 指CPU平均使用率。</p> <p>取值范围: 50-100</p>
max_flavor	String	<p>参数解释: 扩容规格上限。</p> <p>取值范围: 当前局点该实例能规格变更的上限。</p>
reduce_enabled	Boolean	<p>参数解释: 自动回缩开关状态。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • true: 已开启 • false: 已关闭
min_flavor	String	<p>参数解释: 缩容规格下限。</p> <p>取值范围: 当前局点该实例能规格变更的下限。</p>

参数	参数类型	描述
silence_start_at	String	<p>参数解释: 静默期开始时间（上一次变更结束时间）。</p> <p>格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。</p> <p>取值范围: 不涉及。</p>
scaling_strategy	ScalingStrategyInfo object	<p>参数解释: 自动变配策略。</p>
max_read_only_count	Integer	<p>参数解释: 只读节点数量上限。</p> <p>取值范围: 2≤当前备节点数<设定值≤15</p>
min_read_only_count	Integer	<p>参数解释: 只读节点数量下限。</p> <p>取值范围: 1-14</p>
read_only_weight	Integer	<p>参数解释: 只读节点读写分离权重。</p> <p>取值范围: 0-1000</p>

表 4-196 ScalingStrategyInfo

参数	参数类型	描述
flavor_switch	String	<p>参数解释: 扩缩规格开关。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • ON: 开启。 • OFF: 关闭。
read_only_switch	String	<p>参数解释: 增删只读节点开关。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • ON: 开启。 • OFF: 关闭。

状态码：400

表 4-197 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-198 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询自动变配。

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

响应示例

状态码：200

Success.

- 自动变配开启时查询自动变配。

```
{  
  "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  
}
```

- 自动变配关闭时查询自动变配。

```
{  
  "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
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowAutoScalingPolicySolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowAutoScalingPolicyRequest request = new ShowAutoScalingPolicyRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowAutoScalingPolicyResponse response = client.showAutoScalingPolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
e.printStackTrace();
System.out.println(e.getStatusCode());
System.out.println(e.getRequestId());
System.out.println(e.getErrorCode());
System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.30 资源预校验

功能介绍

资源预校验。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/resource-check

表 4-199 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-200 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围: <ul style="list-style-type: none">en-uszh-cn

表 4-201 请求 Body 参数

参数	是否必选	参数类型	描述
action	是	String	校验类型。 <ul style="list-style-type: none">createInstance: 校验创建实例。createReadOnlyNode: 校验创建只读节点。resizeFlavor: 校验规格变更。
resource	是	CheckResourceInfo object	资源信息。

表 4-202 CheckResourceInfo

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目ID。action为createInstance时必填。
instance_num	否	Integer	实例数量。action为createInstance时必填。
mode	否	String	实例类型，目前仅支持Cluster。action为createInstance时必填。
availability_zone_mode	否	String	可用区类型，单可用区single或多可用区multi。action为createInstance时必填。
node_num	否	Integer	节点数量。action为createInstance、createReadOnlyNode时必填。
flavor_ref	否	String	规格码。action为createInstance、resizeFlavor时必填。
availability_zone	否	String	可用区码。
subnet_id	否	String	子网ID。action为createInstance时必填。
instance_id	否	String	实例ID。action为createReadOnlyNode、resizeFlavor时必填。

响应参数

状态码：200

表 4-203 响应 Body 参数

参数	参数类型	描述
result	Boolean	结果。 <ul style="list-style-type: none">• true：表示通过。• false：表示不通过。

状态码：400

表 4-204 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-205 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 创建实例资源预校验。

```
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"
  }
}
```

- 添加只读资源预校验。

```
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/resource-check
```

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

- 规格变更资源预校验。

```
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/resource-check
```

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

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

- 创建实例资源预校验。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CheckResourceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        CheckResourceRequest request = new CheckResourceRequest();
        CheckResourceRequestBody body = new CheckResourceRequestBody();
        CheckResourceInfo resourcebody = new CheckResourceInfo();
        resourcebody.withEnterpriseProjectId("0")
            .withInstanceNum(1)
            .withMode("Cluster")
            .withAvailabilityZoneMode("single")
            .withNodeNum(2)
            .withFlavorRef("gaussdb.mysql.xlarge.x86.4")
            .withAvailabilityZone("cn-southwest-244b")
            .withSubnetId("1e9f71dd-9192-4c0d-9739-161d8dcca68c");
        body.withResource(resourcebody);
        body.withAction("createInstance");
        request.withBody(body);
        try {
            CheckResourceResponse response = client.checkResource(request);
        }
    }
}
```



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

- 添加只读资源预校验。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CheckResourceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CheckResourceRequest request = new CheckResourceRequest();
        CheckResourceRequestBody body = new CheckResourceRequestBody();
        CheckResourceInfo resourcebody = new CheckResourceInfo();
        resourcebody.withNodeNum(1)
            .withInstanceId("376e0847a2224e95afcd3e607eccd544in07");
        body.withResource(resourcebody);
        body.withAction("createReadOnlyNode");
        request.withBody(body);
        try {
            CheckResourceResponse response = client.checkResource(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
        }
    }
}
```

```
        System.out.println(e.getErrorMsg());
    }
}
}
```

- 规格变更资源预校验。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CheckResourceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CheckResourceRequest request = new CheckResourceRequest();
        CheckResourceRequestBody body = new CheckResourceRequestBody();
        CheckResourceInfo resourcebody = new CheckResourceInfo();
        resourcebody.withFlavorRef("gaussdb.mysql.xlarge.x86.4")
            .withInstanceId("376e0847a2224e95afcd3e607eccd544in07");
        body.withResource(resourcebody);
        body.withAction("resizeFlavor");
        request.withBody(body);
        try {
            CheckResourceResponse response = client.checkResource(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- 创建实例资源预校验。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CheckResourceRequest()
        resourcebody = CheckResourceInfo(
            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"
        )
        request.body = CheckResourceRequestBody(
            resource=resourcebody,
            action="createInstance"
        )
        response = client.check_resource(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 添加只读资源预校验。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = CheckResourceRequest()
    resourcebody = CheckResourceInfo(
        node_num=1,
        instance_id="376e0847a2224e95afcd3e607eccd544in07"
    )
    request.body = CheckResourceRequestBody(
        resource=resourcebody,
        action="createReadOnlyNode"
    )
    response = client.check_resource(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 规格变更资源预校验。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CheckResourceRequest()
        resourcebody = CheckResourceInfo(
            flavor_ref="gaussdb.mysql.xlarge.x86.4",
            instance_id="376e0847a2224e95afcd3e607eccd544in07"
        )
        request.body = CheckResourceRequestBody(
            resource=resourcebody,
            action="resizeFlavor"
        )
        response = client.check_resource(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 创建实例资源预校验。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CheckResourceRequest{
        enterpriseProjectIdResource:= "0"
        instanceNumResource:= int32(1)
        modeResource:= "Cluster"
        availabilityZoneModeResource:= "single"
        nodeNumResource:= int32(2)
        flavorRefResource:= "gaussdb.mysql.xlarge.x86.4"
        availabilityZoneResource:= "cn-southwest-244b"
        subnetIdResource:= "1e9f71dd-9192-4c0d-9739-161d8dcca68c"
        resourcebody := &model.CheckResourceInfo{
            EnterpriseProjectId: &enterpriseProjectIdResource,
            InstanceNum: &instanceNumResource,
            Mode: &modeResource,
            AvailabilityZoneMode: &availabilityZoneModeResource,
            NodeNum: &nodeNumResource,
            FlavorRef: &flavorRefResource,
            AvailabilityZone: &availabilityZoneResource,
            SubnetId: &subnetIdResource,
        }
    }
    request.Body = &model.CheckResourceRequestBody{
        Resource: resourcebody,
        Action: "createInstance",
    }
    response, err := client.CheckResource(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 添加只读资源预校验。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CheckResourceRequest{}
    nodeNumResource := int32(1)
    instanceIdResource := "376e0847a2224e95afcd3e607eccd544in07"
    resourcebody := &model.CheckResourceInfo{
        NodeNum: &nodeNumResource,
        InstanceId: &instanceIdResource,
    }
    request.Body = &model.CheckResourceRequestBody{
        Resource: resourcebody,
        Action: "createReadOnlyNode",
    }
    response, err := client.CheckResource(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 规格变更资源预校验。

```
package main

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

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

```
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CheckResourceRequest{}
flavorRefResource:= "gaussdb.mysql.xlarge.x86.4"
instanceIdResource:= "376e0847a2224e95afcd3e607eccd544in07"
resourcebody := &model.CheckResourceInfo{
    FlavorRef: &flavorRefResource,
    InstanceId: &instanceIdResource,
}
request.Body = &model.CheckResourceRequestBody{
    Resource: resourcebody,
    Action: "resizeFlavor",
}
response, err := client.CheckResource(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.31 查询实例列表

功能介绍

根据指定条件查询实例列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3.1/{project_id}/instances

表 4-206 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-207 Query 参数

参数	是否必选	参数类型	描述
id	否	String	实例ID。“*”为系统保留字符，如果id是以“*”起始，表示按照“*”后面的值模糊匹配，否则，按照id精确匹配查询。不能只传入“*”。
name	否	String	实例名称。 “*”为系统保留字符，如果name是以“*”起始，表示按照“*”后面的值模糊匹配，否则，按照name精确匹配查询。不能只传入“*”。
type	否	String	按照实例类型查询。目前仅支持Cluster。
datastore_type	否	String	数据库类型，现在只支持gaussdb-mysql。
vpc_id	否	String	虚拟私有云ID。
subnet_id	否	String	子网的网络ID信息。
private_ip	否	String	读写内网IP地址。
readonly_private_ip	否	String	读内网IP地址。
proxy_ip	否	String	读写分离IP地址。

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。
tags	否	String	根据实例标签键值对进行查询。 <ul style="list-style-type: none">• {key}表示标签键。• {value}表示标签值。 如果同时使用多个标签键值对进行查询，中间使用逗号分隔开，表示查询同时包含指定标签键值对的实例。key不能重复，key之间是与的关系。

请求参数

表 4-208 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">• en-us• zh-cn

响应参数

状态码：200

表 4-209 响应 Body 参数

参数	参数类型	描述
instances	Array of MysqlInstanceListInfoUnifyStatus objects	实例列表信息。
total_count	Integer	总记录数。

表 4-210 MysqlInstanceListInfoUnifyStatus

参数	参数类型	描述
id	String	实例ID, 严格匹配UUID规则。
name	String	创建的实例名称。
status	String	实例状态。 取值： <ul style="list-style-type: none">值为“creating”，表示实例正在创建。值为“normal”，表示实例正常。值为“abnormal”，表示实例异常。值为“createfail”，表示实例创建失败。
private_ips	Array of strings	实例写内网IP地址列表。弹性云服务器创建成功后该值存在，其他情况下为空字符串列表。
proxy_ips	Array of strings	实例读写分离IP地址列表。TaurusDB实例开启代理成功后该值存在，其他情况下为空列表。
readonly_private_ips	Array of strings	实例读内网IP地址列表。弹性云服务器创建成功后该值存在，其他情况下为空列表。
public_ips	Array of strings	实例外网IP地址列表。
port	String	数据库端口号。
type	String	实例类型，取值为“Cluster”。
region	String	实例所在区域。
datastore	MysqlDatastoreWithKernelVersion object	数据库信息。

参数	参数类型	描述
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
flavor_ref	String	规格码。
flavor_info	MysqlFlavorInfo object	flavor规格信息。
volume	MysqlVolumeInfo object	存储盘信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
charge_info	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
tags	Array of InstanceTagItem objects	标签列表。

表 4-211 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 4-212 MysqlFlavorInfo

参数	参数类型	描述
vcpus	String	CPU核数。
ram	String	内存大小，单位GB。

表 4-213 MysqlVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
size	String	已使用磁盘大小，单位GB。

表 4-214 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 4-215 MysqlChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： <ul style="list-style-type: none">prePaid：预付费，即包年/包月。postPaid：后付费，即按需付费。
period_type	String	订购周期类型。 取值范围： <ul style="list-style-type: none">month：包月。year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。

参数	参数类型	描述
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： <ul style="list-style-type: none">“period_type”为“month”时，取值为1~9。“period_type”为“year”时，取值为1~3。
is_auto_renew	String	创建包年/包月实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none">true：为自动续订。false：为不自动续订，默认该方式。
is_auto_pay	String	创建包年/包月实例时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none">true：为自动支付，默认该方式。false：为手动支付。

表 4-216 InstanceTagItem

参数	参数类型	描述
key	String	标签键。
value	String	标签值。

状态码：400

表 4-217 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-218 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询TaurusDB实例列表，读写内网IP地址是192.168.0.142。

```
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=192.168.0.142&offset=
0&limit=10&tags=taurusKey1=value1
```

响应示例

状态码：200

Success.

```
{
  "total_count": 1,
  "instances": [ {
    "id": "61a4ea66210545909d74a05c27a7179ein07",
    "name": "gaussdb-mysql-instance01",
    "status": "normal",
    "port": 3306,
    "type": "Cluster",
    "private_ips": [ "192.168.0.142" ],
    "readonly_private_ips": [ "192.168.0.228", "192.168.0.165" ],
    "proxy_ips": [ "192.168.0.15" ],
    "db_user_name": "root",
    "region": "cn-north-4",
    "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": "taurusKey1",
  "value": "value1"
}]
}]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListGaussMySQLInstancesUnifyStatusSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGaussMySQLInstancesUnifyStatusRequest request = new
        ListGaussMySQLInstancesUnifyStatusRequest();
        try {
            ListGaussMySQLInstancesUnifyStatusResponse response =
            client.listGaussMySQLInstancesUnifyStatus(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListGaussMySQLInstancesUnifyStatusRequest()
        response = client.list_gauss_my_sql_instances_unify_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```



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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.32 查询实例详情信息

功能介绍

查询实例详情信息。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-219 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-220 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-221 响应 Body 参数

参数	参数类型	描述
instance	MysqlInstanceInfoDetailUnifyStatus object	实例信息。

表 4-222 MysqlInstanceInfoDetailUnifyStatus

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。

参数	参数类型	描述
status	String	实例状态。 取值： <ul style="list-style-type: none">值为“creating”，表示实例正在创建。值为“normal”，表示实例正常。值为“abnormal”，表示实例异常。值为“createfail”，表示实例创建失败。
port	String	数据库端口号。
alias	String	实例备注
type	String	实例类型，取值为“Cluster”。
charge_info	MysqlInstanceChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
node_count	Integer	节点个数。
datastore	MysqlDatastoreWithKernelVersion object	数据库信息。
backup_used_space	Double	备份空间使用大小，单位为GB。
created	String	创建时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与“created”字段对应格式完全相同。
private_write_ips	Array of strings	实例的写内网IP地址。
private_dns_names	Array of strings	实例内网域名列表。实例创建成功后，需要手动申请内网域名，否则查询内网域名为空。
public_ips	String	实例的公网IP地址。
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
configuration_id	String	实例创建的模板ID，或者应用到实例的最新参数组模板ID。

参数	参数类型	描述
backup_strategy	MysqlBackupStrategy object	自动备份策略。
nodes	Array of MysqlInstanceNodeInfo objects	节点信息。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
az_mode	String	可用区模式。 取值范围： <ul style="list-style-type: none">• single: 单可用区。• multi: 多可用区。
master_az_code	String	主可用区。
maintenance_window	String	可维护时间窗，为UTC时间。
tags	Array of MysqlTags objects	实例标签。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
proxies	Array of MysqlProxyInfo objects	代理信息。
tde_info	MysqlTdeInfo object	透明数据加密配置信息，支持AES256、SM4加密算法。 透明加密功能目前处于公测阶段，如需使用，请提交工单联系客服人员申请权限。

表 4-223 MysqlInstanceChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。
order_id	String	订单号。仅包年包月返回。

表 4-224 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 4-225 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 4-226 MysqlInstanceNodeInfo

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	节点名称。
type	String	节点类型。 取值范围： <ul style="list-style-type: none">• master：主节点。• slave：只读节点。
status	String	节点状态。
port	Integer	数据库端口号。
private_read_ips	Array of strings	节点的读内网地址。
volume	MysqlInstanceNodeVolumeInfo object	存储盘信息。
az_code	String	可用区。
region_code	String	实例所在的区域。

参数	参数类型	描述
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
flavor_id	String	规格ID。
flavor_ref	String	规格码。
max_connections	String	允许的最大连接数。
vcpus	String	CPU核数。
ram	String	内存大小，单位为GB。
need_restart	Boolean	是否需要重启使修改的参数生效。
priority	Integer	主备倒换优先级。

表 4-227 MysqlInstanceNodeVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
used	String	已使用磁盘大小，单位GB。
size	Long	包年/包月实例购买的存储空间大小，单位GB。

表 4-228 MysqlTags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。 key不能为空或者空字符串，不能为空格。 字符集：A-Z, a-z, 0-9, '-', '_', UNICODE字符(\u4E00-\u9FFF)。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '.', '-', '_', UNICODE字符(\u4E00-\u9FFF)。

表 4-229 MysqlProxyInfo

参数	参数类型	描述
pool_id	String	数据库代理ID。
name	String	数据库代理名称。
address	String	Proxy读写分离地址。

表 4-230 MysqlTdeInfo

参数	参数类型	描述
enable_tde	Boolean	是否打开透明加密功能。
encryption_type	String	透明加密算法，支持AES256、SM4加密算法。

状态码：400

表 4-231 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-232 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询指定实例的详细信息。

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

响应示例

状态码：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": "10.154.219.187",
  "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-a4e0-847b11576b58",
  "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": [ "192.168.0.163" ],
    "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.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": [ "192.168.0.162" ],
    "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.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": "192.168.10.76",
  "name": "proxy-name"
} ]
}
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySQLInstanceInfoUnifyStatusSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGaussMySQLInstanceInfoUnifyStatusRequest request = new
        ShowGaussMySQLInstanceInfoUnifyStatusRequest();
```

```
request.withInstanceId("{instance_id}");
try {
    ShowGaussMySQLInstanceInfoUnifyStatusResponse response =
client.showGaussMySQLInstanceInfoUnifyStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.33 批量查询实例详情

功能介绍

批量查询实例详情。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-233 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-234 Query 参数

参数	是否必选	参数类型	描述
instance_ids	是	String	实例ID, 严格匹配UUID规则。 最多同时输入20个实例ID, 用英文逗号分隔。

请求参数

表 4-235 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围: <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码: 200

表 4-236 响应 Body 参数

参数	参数类型	描述
instances	Array of MysqlInstanceInfoDetailUnifyStatus objects	实例详情。

表 4-237 MysqlInstanceInfoDetailUnifyStatus

参数	参数类型	描述
id	String	实例ID, 严格匹配UUID规则。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。
status	String	实例状态。 取值： <ul style="list-style-type: none">值为“creating”，表示实例正在创建。值为“normal”，表示实例正常。值为“abnormal”，表示实例异常。值为“createfail”，表示实例创建失败。
port	String	数据库端口号。
alias	String	实例备注
type	String	实例类型, 取值为“Cluster”。
charge_info	MysqlInstanceChargeInfo object	计费类型信息, 支持包年包月和按需, 默认为按需。
node_count	Integer	节点个数。
datastore	MysqlDatastoreWithKernelVersion object	数据库信息。
backup_used_space	Double	备份空间使用大小, 单位为GB。
created	String	创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
updated	String	更新时间, 格式与"created"字段对应格式完全相同。

参数	参数类型	描述
private_write_ips	Array of strings	实例的写内网IP地址。
private_dns_names	Array of strings	实例内网域名列表。实例创建成功后，需要手动申请内网域名，否则查询内网域名为空。
public_ips	String	实例的公网IP地址。
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
configuration_id	String	实例创建的模板ID，或者应用到实例的最新参数组模板ID。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
nodes	Array of MysqlInstanceNodeInfo objects	节点信息。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
az_mode	String	可用区模式。 取值范围： <ul style="list-style-type: none">• single: 单可用区。• multi: 多可用区。
master_az_code	String	主可用区。
maintenance_window	String	可维护时间窗，为UTC时间。
tags	Array of MysqlTags objects	实例标签。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
proxies	Array of MysqlProxyInfo objects	代理信息。

参数	参数类型	描述
tde_info	MysqlTdeInfo object	透明数据加密配置信息，支持AES256、SM4加密算法。 透明加密功能目前处于公测阶段，如需使用，请提交工单联系客服人员申请权限。

表 4-238 MysqlInstanceChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。
order_id	String	订单号。仅包年包月返回。

表 4-239 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 4-240 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 4-241 MysqlInstanceNodeInfo

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。

参数	参数类型	描述
name	String	节点名称。
type	String	节点类型。 取值范围： <ul style="list-style-type: none">• master: 主节点。• slave: 只读节点。
status	String	节点状态。
port	Integer	数据库端口号。
private_read_ips	Array of strings	节点的读内网地址。
volume	MysqlInstanceNodeVolumeInfo object	存储盘信息。
az_code	String	可用区。
region_code	String	实例所在的区域。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
flavor_id	String	规格ID。
flavor_ref	String	规格码。
max_connections	String	允许的最大连接数。
vcpus	String	CPU核数。
ram	String	内存大小，单位为GB。
need_restart	Boolean	是否需要重启使修改的参数生效。
priority	Integer	主备倒换优先级。

表 4-242 MysqlInstanceNodeVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
used	String	已使用磁盘大小，单位GB。
size	Long	包年/包月实例购买的存储空间大小，单位GB。

表 4-243 MysqlTags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。 字符集：A-Z, a-z, 0-9, '-', '_', UNICOD字符 (\u4E00-\u9FFF)。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '-', '_', UNICOD字符 (\u4E00-\u9FFF)。

表 4-244 MysqlProxyInfo

参数	参数类型	描述
pool_id	String	数据库代理ID。
name	String	数据库代理名称。
address	String	Proxy读写分离地址。

表 4-245 MysqlTdeInfo

参数	参数类型	描述
enable_tde	Boolean	是否打开透明加密功能。
encryption_type	String	透明加密算法，支持AES256、SM4加密算法。

状态码：400

表 4-246 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-247 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

批量查询实例信息。

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

响应示例

状态码: 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": "10.154.219.187",  
    "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-a4e0-847b11576b58",  
    "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": [ "192.168.0.163" ],  
      "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.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" : [ "192.168.0.162" ],
  "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.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" : "192.168.10.76",
  "name" : "proxy-name"
} ]
} ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
public class ListGaussMySQLInstanceDetailInfoUnifyStatusSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListGaussMySQLInstanceDetailInfoUnifyStatusRequest request = new  
        ListGaussMySQLInstanceDetailInfoUnifyStatusRequest();  
        try {  
            ListGaussMySQLInstanceDetailInfoUnifyStatusResponse response =  
            client.listGaussMySQLInstanceDetailInfoUnifyStatus(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.getenv("CLOUD_SDK_AK")  
    sk = os.getenv("CLOUD_SDK_SK")  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()
```

```
try:
    request = ListGaussMySQLInstanceDetailInfoUnifyStatusRequest()
    response = client.list_gauss_my_sql_instance_detail_info_unify_status(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.34 设置回收站策略

功能介绍

设置回收站策略

调用方法

请参见[如何调用API](#)。

URI

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

表 4-248 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-249 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。

参数	是否必选	参数类型	描述
X-Language	否	String	语言。

表 4-250 请求 Body 参数

参数	是否必选	参数类型	描述
recycle_policy	否	RecyclePolicy object	回收站策略。

表 4-251 RecyclePolicy

参数	是否必选	参数类型	描述
retention_period_in_days	是	String	保留天数，1-7天。

响应参数

状态码：400

表 4-252 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-253 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置回收站策略，保留5天

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

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

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

设置回收站策略，保留5天

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SetRecyclePolicySolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SetRecyclePolicyRequest request = new SetRecyclePolicyRequest();
        SetRecyclePolicyRequestBody body = new SetRecyclePolicyRequestBody();
        RecyclePolicy recyclePolicybody = new RecyclePolicy();
        recyclePolicybody.withRetentionPeriodInDays("5");
        body.withRecyclePolicy(recyclePolicybody);
        request.withBody(body);
        try {
            SetRecyclePolicyResponse response = client.setRecyclePolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```



```
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

设置回收站策略，保留5天

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = SetRecyclePolicyRequest()
        recyclePolicybody = RecyclePolicy(
            retention_period_in_days="5"
        )
        request.body = SetRecyclePolicyRequestBody(
            recycle_policy=recyclePolicybody
        )
        response = client.set_recycle_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置回收站策略，保留5天

```
package main

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

func main() {
```

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

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.SetRecyclePolicyRequest{}
recyclePolicybody := &model.RecyclePolicy{
    RetentionPeriodInDays: "5",
}
request.Body = &model.SetRecyclePolicyRequestBody{
    RecyclePolicy: recyclePolicybody,
}
response, err := client.SetRecyclePolicy(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.35 查询回收站策略

功能介绍

查询回收站策略

调用方法

请参见[如何调用API](#)。

URI

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

表 4-254 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-255 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-256 响应 Body 参数

参数	参数类型	描述
recycle_policy	RecyclePolicy object	回收站策略。

表 4-257 RecyclePolicy

参数	参数类型	描述
retention_period_in_days	String	保留天数，1-7天。

状态码：400

表 4-258 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-259 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询回收站策略

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

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowRecyclePolicySolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRecyclePolicyRequest request = new ShowRecyclePolicyRequest();
        try {
            ShowRecyclePolicyResponse response = client.showRecyclePolicy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = ShowRecyclePolicyRequest()
    response = client.show_recycle_policy(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.36 查询回收站实例信息

功能介绍

查询回收站实例信息

调用方法

请参见[如何调用API](#)。

URI

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

表 4-260 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-261 Query 参数

参数	是否必选	参数类型	描述
limit	否	Integer	查询记录数。默认为10，不能为负数，最小值为1，最大值为100。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。

请求参数

表 4-262 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-263 响应 Body 参数

参数	参数类型	描述
total_count	String	数据总数
instances	Array of RecycleInstanceV3 objects	回收站实例信息

表 4-264 RecycleInstanceV3

参数	参数类型	描述
id	String	实例ID。
name	String	实例名称。
ha_mode	String	实例类型。
engine_name	String	引擎名称。
engine_version	String	引擎版本。
pay_model	String	计费模式。
create_at	Integer	创建时间。
deleted_at	Integer	删除时间。

参数	参数类型	描述
volume_type	String	磁盘类型。
volume_size	String	磁盘大小。
data_vip	String	数据面VIP。
data_vip_ipv6	String	数据面IPV6。
enterprise_project_id	String	企业项目ID。
enterprise_project_name	String	企业项目名称。
backup_level	String	备份级别。
recycle_backup_id	String	备份ID。
recycle_status	String	回收状态。

状态码：400

表 4-265 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-266 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询回收站实例信息

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

响应示例

状态码：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"
  }
  ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListRecycleInstancesSolution {

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

```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListRecycleInstancesRequest request = new ListRecycleInstancesRequest();
try {
    ListRecycleInstancesResponse response = client.listRecycleInstances(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListRecycleInstancesRequest()
        response = client.list_recycle_instances(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.37 批量修改节点名称

功能介绍

批量修改节点名称。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-267 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。

请求参数

表 4-268 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

表 4-269 请求 Body 参数

参数	是否必选	参数类型	描述
node_list	是	Array of SingleNodeInfo objects	节点信息列表

表 4-270 SingleNodeInfo

参数	是否必选	参数类型	描述
node_id	是	String	节点ID。
name	是	String	节点名称。支持中文、数字、字母、连接符-和_，长度为4-128。

响应参数

状态码：200

表 4-271 响应 Body 参数

参数	参数类型	描述
job_id	String	workflowID。

状态码：400

表 4-272 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-273 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

批量修改节点名称。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/nodes/name
{
  "node_list" : [ {
    "node_id" : "799a0f2fa49d4151bf2f7063c1fbba36no07",
    "name" : "gauss-cdf5_node03"
  } ]
}
```

响应示例

状态码：200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

批量修改节点名称。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

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

public class RenameInstanceNodeSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
```

```
        .build();
RenameInstanceNodeRequest request = new RenameInstanceNodeRequest();
request.withInstanceId("{instance_id}");
RenameInstanceNodeRequestBody body = new RenameInstanceNodeRequestBody();
List<SingleNodeInfo> listbodyNodeList = new ArrayList<>();
listbodyNodeList.add(
    new SingleNodeInfo()
        .withNodeId("799a0f2fa49d4151bf2f7063c1fbba36no07")
        .withName("gauss-cdf5_node03")
);
body.withNodeList(listbodyNodeList);
request.withBody(body);
try {
    RenameInstanceNodeResponse response = client.renameInstanceNode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

批量修改节点名称。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RenameInstanceNodeRequest()
        request.instance_id = "{instance_id}"
        listNodeListbody = [
            SingleNodeInfo(
                node_id="799a0f2fa49d4151bf2f7063c1fbba36no07",
                name="gauss-cdf5_node03"
            )
        ]
        request.body = RenameInstanceNodeRequestBody(
            node_list=listNodeListbody
```



```
)  
response = client.rename_instance_node(request)  
print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

Go

批量修改节点名称。

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.RenameInstanceNodeRequest{}  
    request.InstanceId = "{instance_id}"  
    var listNodeListbody = []model.SingleNodeInfo{  
        {  
            NodeId: "799a0f2fa49d4151bf2f7063c1fbba36no07",  
            Name: "gauss-cdf5_node03",  
        },  
    }  
    request.Body = &model.RenameInstanceNodeRequestBody{  
        NodeList: listNodeListbody,  
    }  
    response, err := client.RenameInstanceNode(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.38 查询自动变配历史记录

功能介绍

查询自动变配历史记录。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-274 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。

表 4-275 Query 参数

参数	是否必选	参数类型	描述
limit	否	String	查询记录数。默认为20。
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。

请求参数

表 4-276 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-277 响应 Body 参数

参数	参数类型	描述
total_count	String	记录总数。
records	Array of AutoScalingRecordInfo objects	自动变配历史记录列表。

表 4-278 AutoScalingRecordInfo

参数	参数类型	描述
id	String	记录ID。
instance_id	String	实例ID。
instance_name	String	实例名称。
scaling_type	String	变配类型。
original_value	String	原始值。
target_value	String	目标值。
result	String	变配结果。
create_at	String	变配时间。

状态码：400

表 4-279 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-280 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询自动变配历史记录

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

响应示例

状态码：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"  
  }]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowAutoScalingHistorySolution {

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

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

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.39 设置 Serverless 配置策略

功能介绍

设置Serverless配置策略。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-281 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID。

请求参数

表 4-282 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

表 4-283 请求 Body 参数

参数	是否必选	参数类型	描述
min_vcpus	是	Integer	单节点VCPU伸缩下限，取值范围可根据 查询数据库规格 接口获取。
max_vcpus	是	Integer	单节点VCPU伸缩上限，取值范围可根据 查询数据库规格 接口获取。

响应参数

状态码：400

表 4-284 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-285 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置VCPUs伸缩下限为1，设置VCPUs伸缩上限为4。

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

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

设置VCPUs伸缩下限为1，设置VCPUs伸缩上限为4。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateServerlessPolicySolution {

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

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

```
GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateServerlessPolicyRequest request = new UpdateServerlessPolicyRequest();
request.withInstanceId("{instance_id}");
UpdateServerlessPolicy body = new UpdateServerlessPolicy();
body.withMaxVcpus(4);
body.withMinVcpus(1);
request.withBody(body);
try {
    UpdateServerlessPolicyResponse response = client.updateServerlessPolicy(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

设置VCPUs伸缩下限为1，设置VCPUs伸缩上限为4。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateServerlessPolicyRequest()
        request.instance_id = "{instance_id}"
        request.body = UpdateServerlessPolicy(
            max_vcpus=4,
            min_vcpus=1
        )
        response = client.update_serverless_policy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

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

Go

设置VCPUs伸缩下限为1，设置VCPUs伸缩上限为4。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateServerlessPolicyRequest{
        request.InstanceId = "{instance_id}"
        request.Body = &model.UpdateServerlessPolicy{
            MaxVcpus: int32(4),
            MinVcpus: int32(1),
        }
    }
    response, err := client.UpdateServerlessPolicy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.40 修改节点故障倒换优先级

功能介绍

修改节点故障倒换优先级。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/nodes/{node_id}/priority

表 4-286 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。
node_id	是	String	节点ID。

请求参数

表 4-287 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	语言。

表 4-288 请求 Body 参数

参数	是否必选	参数类型	描述
priority	是	String	故障倒换优先级。 故障倒换优先级的取值范围为 1~16 以及 -1。取正数时数字越小, 优先级越大, 即故障倒换时, 主节点会优先倒换到优先级高的只读节点上, 优先级相同的只读节点选为主节点的概率相同。取 -1 时表示节点不参与故障倒换, 当单可用区实例超过两个只读节点, 或者多可用区实例修改后的可用区多于 1 个时可以设置成 -1。

响应参数

状态码: 200

表 4-289 响应 Body 参数

参数	参数类型	描述
job_id	String	工作流ID。

状态码: 400

表 4-290 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-291 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改节点故障倒换优先级为2。

```
PUT https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07//nodes/ss62c18799854a919bab633874c159dfno01/priority
{
  "priority" : 2
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "b054f3e1-64f8-4219-ad48-f9ac494c6983"
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改节点故障倒换优先级为2。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ModifyNodePrioritySolution {

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ModifyNodePriorityRequest request = new ModifyNodePriorityRequest();
request.withInstanceId("{instance_id}");
request.withNodeId("{node_id}");
ModifyNodePriorityRequestBody body = new ModifyNodePriorityRequestBody();
body.withPriority("2");
request.withBody(body);
try {
    ModifyNodePriorityResponse response = client.modifyNodePriority(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

修改节点故障倒换优先级为2。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ModifyNodePriorityRequest()
        request.instance_id = "{instance_id}"
        request.node_id = "{node_id}"
        request.body = ModifyNodePriorityRequestBody(
            priority="2"
        )
        response = client.modify_node_priority(request)
```

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

Go

修改节点故障倒换优先级为2。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ModifyNodePriorityRequest{}
    request.InstanceId = "{instance_id}"
    request.NodeId = "{node_id}"
    request.Body = &model.ModifyNodePriorityRequestBody{
        Priority: "2",
    }
    response, err := client.ModifyNodePriority(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.3.41 查询弹性公网 IP

功能介绍

查询弹性公网IP。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/eip

表 4-292 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID。

请求参数

表 4-293 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-294 响应 Body 参数

参数	参数类型	描述
can_enable_public_access	Boolean	是否能访问公网
id	String	弹性公网ID。
type	String	弹性公网IP的网络类型。
port_id	String	端口ID。
public_ip_address	String	弹性公网IP地址。
private_ip_address	String	私网IP地址。
status	String	弹性公网IP状态。
tenant_id	String	租户ID。
create_time	String	创建时间。
bandwidth_id	String	带宽ID。
bandwidth_name	String	带宽名称。
bandwidth_size	String	带宽大小。
bandwidth_share_type	String	带宽类型。枚举值：PER 和WHOLE。

参数	参数类型	描述
profile	Object	额外参数, 包括订单id、产品id等信息。如果profile不为空, 说明是包周期的弹性公网IP。

状态码: 400

表 4-295 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-296 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询弹性公网IP。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/12a49c2dc32648df8dd25e2976f70180in07/eip
```

响应示例

状态码: 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-8f13-2f8e3d8bbbb2",
  "bandwidth_name": "bandwidth-d3f4",
  "bandwidth_size": 1,
  "bandwidth_share_type": "PER",
```

```
"profile" : { }  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowInstanceEipSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowInstanceEipRequest request = new ShowInstanceEipRequest();  
        request.withInstanceld("{instance_id}");  
        try {  
            ShowInstanceEipResponse response = client.showInstanceEip(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials
```

```
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowInstanceEipRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowInstanceEip(request)
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4 备份管理

4.4.1 设置同区域备份策略

功能介绍

设置同区域备份策略。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/backups/policy/update

表 4-297 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID, 严格匹配UUID规则。

请求参数

表 4-298 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-299 请求 Body 参数

参数	是否必选	参数类型	描述
backup_policy	是	MysqlBackup Policy object	数据库备份策略信息。

表 4-300 MysqlBackupPolicy

参数	是否必选	参数类型	描述
start_time	是	String	备份时间段。自动备份将在该时间段内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。HH取值必须比hh大1。mm和MM取值必须相同，且取值必须为00。 取值示例：21:00-22:00

参数	是否必选	参数类型	描述
keep_days	是	Integer	备份文件的保留天数。取值范围：1~732。您也可以联系客服申请开通最大保留天数为3660。
period	是	String	备份周期配置。自动备份将在每星期指定的天进行。 取值范围：格式为逗号隔开的数字，数字加1表示自动备份的星期。 取值示例：1,2,3,4,5,6,7则表示备份周期配置为星期二、星期三、星期四、星期五、星期六、星期日、星期一。
retention_num_backup_level1	否	Integer	一级备份保留数量，取值：0或1，默认值为0。当一级备份开关开启时，该参数必传。反之，不能传。

响应参数

状态码：200

表 4-301 响应 Body 参数

参数	参数类型	描述
status	String	状态信息。
instance_id	String	实例ID，严格匹配UUID规则。
instance_name	String	实例名称。

状态码：400

表 4-302 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-303 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例的自动备份策略，每周的周二至周六的19:00-20:00进行备份，备份文件保留7天。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
21b6ea5a78244de98c1c2622e1dc593ain07/backups/policy/update
```

```
{  
  "backup_policy" : {  
    "keep_days" : 7,  
    "start_time" : "19:00-20:00",  
    "period" : "1,2,3,4,5"  
  }  
}
```

响应示例

状态码：200

Success.

```
{  
  "status" : "COMPLETED",  
  "instance_id" : "21b6ea5a78244de98c1c2622e1dc593ain07",  
  "instance_name" : "gauss-mysql"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改实例的自动备份策略，每周的周二至周六的19:00-20:00进行备份，备份文件保留7天。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateGaussMySQLBackupPolicySolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateGaussMySqlBackupPolicyRequest request = new UpdateGaussMySqlBackupPolicyRequest();
request.withInstanceId("{instance_id}");
MysqlUpdateBackupPolicyRequest body = new MysqlUpdateBackupPolicyRequest();
MysqlBackupPolicy backupPolicybody = new MysqlBackupPolicy();
backupPolicybody.withStartTime("19:00-20:00")
    .withKeepDays(7)
    .withPeriod("1,2,3,4,5");
body.withBackupPolicy(backupPolicybody);
request.withBody(body);
try {
    UpdateGaussMySqlBackupPolicyResponse response =
client.updateGaussMySqlBackupPolicy(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改实例的自动备份策略，每周的周二至周六的19:00-20:00进行备份，备份文件保留7天。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = UpdateGaussMySqlBackupPolicyRequest()
    request.instance_id = "{instance_id}"
    backupPolicybody = MysqlBackupPolicy(
        start_time="19:00-20:00",
        keep_days=7,
        period="1,2,3,4,5"
    )
    request.body = MysqlUpdateBackupPolicyRequest(
        backup_policy=backupPolicybody
    )
    response = client.update_gauss_my_sql_backup_policy(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改实例的自动备份策略，每周的周二至周六的19:00-20:00进行备份，备份文件保留7天。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySqlBackupPolicyRequest{
        request.InstanceId = "{instance_id}"
        backupPolicybody := &model.MysqlBackupPolicy{
            StartTime: "19:00-20:00",
            KeepDays: int32(7),
            Period: "1,2,3,4,5",
        }
    }
    request.Body = &model.MysqlUpdateBackupPolicyRequest{
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.2 创建手动备份

功能介绍

创建手动备份。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/backups/create

表 4-304 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-305 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-306 请求 Body 参数

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID，严格匹配UUID规则。
name	是	String	备份名称。 取值范围：最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。
description	否	String	备份描述，不能包含特殊字符！<"='> &和回车，不大于256个字符。

响应参数

状态码：201

表 4-307 响应 Body 参数

参数	参数类型	描述
backup	backup object	备份信息。
job_id	String	任务ID。

表 4-308 backup

参数	参数类型	描述
id	String	备份ID。
name	String	备份名称。
description	String	备份描述。
begin_time	String	备份开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”，其中T指时间字段的开始；Z指时区偏移量。
status	String	备份状态，取值： <ul style="list-style-type: none">• BUILDING：备份中。• COMPLETED：备份完成。• FAILED：备份失败。• AVAILABLE：备份可用。
type	String	备份类型，手动全量备份，取值为manual。
instance_id	String	实例ID，严格匹配UUID规则。

状态码：400

表 4-309 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-310 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建手动备份。

POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/backups/create

```
{
  "instance_id": "e761be53970c48aeb2073b179dccfab9in07",
  "name": "backup-1",
  "description": "手动备份"
}
```

响应示例

状态码: 201

Success.

```
{
  "backup": {
    "id": "f58f674c11224fd99772b89f892da6f5br07",
    "name": "backup-1",
    "description": "手动备份",
    "begin_time": "2020-07-07T01:17:05+0800",
    "status": "BUILDING",
    "type": "manual",
    "instance_id": "ef25188419f941309882d2986b2210b9in07"
  },
  "job_id": "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建手动备份。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateGaussMySQLBackupSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
    }
}
```

```
CreateGaussMySqlBackupRequest request = new CreateGaussMySqlBackupRequest();
MysqlCreateBackupRequest body = new MysqlCreateBackupRequest();
body.withDescription("手动备份");
body.withName("backup-1");
body.withInstanceId("e761be53970c48aeb2073b179dccb9in07");
request.withBody(body);
try {
    CreateGaussMySqlBackupResponse response = client.createGaussMySqlBackup(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

创建手动备份。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateGaussMySqlBackupRequest()
        request.body = MysqlCreateBackupRequest(
            description="手动备份",
            name="backup-1",
            instance_id="e761be53970c48aeb2073b179dccb9in07"
        )
        response = client.create_gauss_my_sql_backup(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```


Go

创建手动备份。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySQLBackupRequest{
        descriptionMysqlCreateBackupRequest:= "手动备份"
        request.Body = &model.MysqlCreateBackupRequest{
            Description: &descriptionMysqlCreateBackupRequest,
            Name: "backup-1",
            InstanceId: "e761be53970c48aeb2073b179dccfab9in07",
        }
    }
    response, err := client.CreateGaussMySQLBackup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.3 查询全量备份列表

功能介绍

查询全量备份列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/backups

表 4-311 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,且长度为32个字符。 默认值: 不涉及。

表 4-312 Query 参数

参数	是否必选	参数类型	描述
instance_id	否	String	参数解释: 实例ID, 此参数是实例的唯一标识。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成, 后缀为in07, 长度为36个字符。 默认取值: 不涉及。
backup_id	否	String	参数解释: 备份ID, 此参数是备份的唯一标识。。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成, 后缀为br07, 长度为36个字符。 默认取值: 不涉及。
backup_type	否	String	参数解释: 备份类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• auto: 自动全量备份。• manual: 手动全量备份。 默认值: 不涉及。

参数	是否必选	参数类型	描述
offset	否	String	参数解释: 索引位置, 偏移量。从第一条数据偏移offset条数据后开始查询。 约束限制: 必须为整数, 不能为负数。 取值范围: ≥0 默认取值: 0
limit	否	String	参数解释: 查询记录数。 约束限制: 必须为整数, 不能为负数。 取值范围: 1-100 默认取值: 100
begin_time	否	String	参数解释: 查询开始时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 约束限制: 不涉及。 取值范围: 比当前时间早。 默认取值: 不涉及。

参数	是否必选	参数类型	描述
end_time	否	String	<p>参数解释: 查询结束时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。</p> <p>其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 比当前时间早, 比开始时间晚。</p> <p>默认取值: 不涉及。</p>
name	否	String	<p>参数解释: 备份名称。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 备份名称长度最小为4个字符, 最大为64个字符且不超过64个字节 (注意: 一个中文字符占用3个字节), 必须以字母或中文开头, 区分大小写, 可以包含字母、数字、中文、中划线或下划线, 不能包含其他特殊字符。</p> <p>默认取值: 不涉及。</p>
instance_name	否	String	<p>参数解释: 实例名称。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 最小为4个字符, 最大为64个字符且不超过64个字节 (注意: 一个中文字符占用3个字节), 必须以字母或中文开头, 区分大小写, 可以包含字母、数字、中划线、下划线或中文, 不能包含其他特殊字符。</p> <p>默认取值: 不涉及。</p>

请求参数

表 4-313 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释： 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制： 不涉及。</p> <p>取值范围： 不涉及。</p> <p>默认值： 不涉及。</p>
X-Language	否	String	<p>参数解释： 请求语言类型。</p> <p>约束限制： 不涉及。</p> <p>取值范围：</p> <ul style="list-style-type: none"> • en-us • zh-cn <p>默认值： en-us。</p>

响应参数

状态码：200

表 4-314 响应 Body 参数

参数	参数类型	描述
backups	Array of backups objects	<p>参数解释： 备份信息。</p> <p>取值范围： 不涉及。</p>

参数	参数类型	描述
total_count	Long	参数解释: 备份文件的总数。 取值范围: ≥0。

表 4-315 backups

参数	参数类型	描述
id	String	参数解释: 备份ID。 取值范围: 只能由英文字母、数字组成, 后缀为br07, 长度为36个字符。
name	String	参数解释: 备份名称。 取值范围: 备份名称长度最小为4个字符, 最大为64个字符且不超过64个字节(注意: 一个中文字符占用3个字节), 必须以字母或中文开头, 区分大小写, 可以包含字母、数字、中文、中划线或下划线, 不能包含其他特殊字符。
begin_time	String	参数解释: 备份开始时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
end_time	String	参数解释: 备份结束时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。

参数	参数类型	描述
status	String	参数解释： 备份状态。 取值范围： <ul style="list-style-type: none">• BUILDING：备份中。• COMPLETED：备份完成。• FAILED：备份失败。• AVAILABLE：备份可用。
take_up_time	Integer	参数解释： 备份花费时间（单位：minutes）。 取值范围： ≥0。
type	String	参数解释： 备份类型。 取值范围： <ul style="list-style-type: none">• auto：自动全量备份。• manual：手动全量备份。
size	Long	参数解释： 备份大小（单位：MB）。 取值范围： >0。
datastore	MysqlDatastoreInBackup object	参数解释： 数据库信息。
instance_id	String	参数解释： 实例ID，此参数是实例的唯一标识。 取值范围： 只能由英文字母、数字组成，后缀为in07，长度为36个字符。
instance_name	String	参数解释： 实例名称。 取值范围： 最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。

参数	参数类型	描述
backup_level	String	<p>参数解释: 备份级别。当开启一级备份开关时, 返回该参数。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • 0: 备份正在创建中或者备份失败。 • 1: 一级备份。 • 2: 二级备份。
description	String	<p>参数解释: 备份文件描述信息。</p> <p>取值范围: 不涉及。</p>

表 4-316 MysqlDatastoreInBackup

参数	参数类型	描述
type	String	<p>参数解释: 数据库引擎。</p> <p>取值范围: gaussdb-mysql。</p>
version	String	<p>参数解释: 数据库版本。</p> <p>取值范围: 8.0。</p>

状态码: 400

表 4-317 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-318 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询指定实例指定备份在时间段内（2020-07-06~2020-07-16）的自动备份列表。

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/backups?instance_id=3ef58db3986540d19f95151309368d34in07&backup_id=7420f28010084e838113e78f77093093br07&backup_type=auto&offset=0&limit=10&begin_time=2020-07-06T10:41:14+0800&end_time=2020-07-16T10:41:14+0800
```

响应示例

状态码：200

Success.

```
{  "backups": [ {    "id": "7420f28010084e838113e78f77093093br07",    "name": "GaussDBforMySQL-gauss-e747-20200708185048266",    "begin_time": "2020-07-08T20:43:14+0800",    "end_time": "2020-07-08T20:45:14+0800",    "take_up_time": 2,    "status": "COMPLETED",    "type": "auto",    "size": 2803,    "datastore": {      "type": "gaussdb-mysql",      "version": "8.0"    },    "instance_id": "3ef58db3986540d19f95151309368d34in07",    "instance_name": "GaussDBforMySQL-gauss-e747",    "backup_level": "2"  } ],  "total_count": 1}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
public class ShowGaussMySQLBackupListSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowGaussMySQLBackupListRequest request = new ShowGaussMySQLBackupListRequest();  
        try {  
            ShowGaussMySQLBackupListResponse response = client.showGaussMySQLBackupList(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.getenv("CLOUD_SDK_AK")  
    sk = os.getenv("CLOUD_SDK_SK")  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ShowGaussMySQLBackupListRequest()  
        response = client.show_gauss_my_sql_backup_list(request)
```

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.4 查询自动备份策略

功能介绍

查询自动备份策略。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/backups/policy

表 4-319 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-320 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-321 响应 Body 参数

参数	参数类型	描述
backup_policy	BackupPolicy object	备份策略信息。

表 4-322 BackupPolicy

参数	参数类型	描述
keep_days	Integer	指定已生成的备份文件可以保存的天数。取值范围：1~732。您也可以联系客服申请开通最大保留天数为3660。
start_time	String	备份时间段。自动备份将在该时间段内触发。 取值范围：格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。
period	String	备份周期配置。自动备份将在每星期指定的天进行。 取值范围：格式为逗号隔开的数字，数字加1表示自动备份的星期。 取值示例：1,2,3,4,5,6,7则表示备份周期配置为星期二、星期三、星期四、星期五、星期六、星期日、星期一。
retention_num_backup_level1	Integer	一级备份保留数量。当一级备份开关开启时，返回此参数。

状态码：400

表 4-323 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-324 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例的自动备份策略。

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/policy
```

响应示例

状态码: 200

Success.

```
{  
  "backup_policy": {  
    "keep_days": "7",  
    "start_time": "19:00-20:00",  
    "period": "1,2",  
    "retention_num_backup_level1": 1  
  }  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowGaussMySQLBackupPolicySolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)
```

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

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

import (
```



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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.5 删除手动备份

功能介绍

删除手动备份。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/backups/{backup_id}

表 4-325 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
backup_id	是	String	备份文件ID。 获取方法参见 查询备份列表 。

请求参数

表 4-326 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-327 响应 Body 参数

参数	参数类型	描述
backup_id	String	备份ID。
backup_name	String	备份名称。

状态码：400

表 4-328 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-329 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除手动备份。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/backups/  
b1182ccdda034f2b9535f3dca5c47e71br07
```

响应示例

状态码：200

Success.

```
{  
  "backup_id": "b1182ccdda034f2b9535f3dca5c47e71br07",  
  "backup_name": "backup-f3c1"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DeleteGaussMySQLBackupSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteGaussMySQLBackupRequest request = new DeleteGaussMySQLBackupRequest();
        request.withBackupId("{backup_id}");
        try {
            DeleteGaussMySQLBackupResponse response = client.deleteGaussMySQLBackup(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = DeleteGaussMySQLBackupRequest()
    request.backup_id = "{backup_id}"
    response = client.delete_gauss_my_sql_backup(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.6 备份恢复到当前实例或已有实例

功能介绍

备份恢复到当前实例或已有实例。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/restore

表 4-330 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释： 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，且长度为32个字符。 默认值： 不涉及。

请求参数

表 4-331 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释： 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制： 不涉及。</p> <p>取值范围： 不涉及。</p> <p>默认值： 不涉及。</p>
X-Language	否	String	<p>参数解释： 请求语言类型。</p> <p>约束限制： 不涉及。</p> <p>取值范围：</p> <ul style="list-style-type: none"> • en-us • zh-cn <p>默认值： en-us。</p>

表 4-332 请求 Body 参数

参数	是否必选	参数类型	描述
target_instance_id	是	String	<p>参数解释： 目标实例ID。</p> <p>约束限制： 不涉及。</p> <p>取值范围： 不涉及。</p> <p>默认取值： 不涉及。</p>

参数	是否必选	参数类型	描述
source_instance_id	是	String	参数解释: 源实例ID。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: 不涉及。
type	是	String	参数解释: 表示恢复方式。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• backup: 表示使用备份文件恢复, 按照此方式恢复时, "backup_id"必选。• timestamp: 表示按时间点恢复, 按照此方式恢复时, "restore_time"必选。 默认取值: 不涉及。
backup_id	否	String	参数解释: 用于恢复的备份ID。当使用备份文件恢复时需要指定该参数。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: 不涉及。

参数	是否必选	参数类型	描述
restore_time	否	Long	<p>参数解释： 备份时间点。</p> <p>约束限制： 格式为UNIX时间戳，单位是毫秒，时区为UTC标准时区。传参时需要将对应时区的时间转为标准时区对应的时间戳，比如，北京时区的时间点需要-8h后再转为时间戳。</p> <p>取值范围： 通过查询可恢复时间段获取。</p> <p>默认取值： 不涉及。</p>

响应参数

状态码：200

表 4-333 响应 Body 参数

参数	参数类型	描述
job_id	String	工作流ID。

状态码：400

表 4-334 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-335 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 按备份文件恢复到当前实例。

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

{
  "target_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "source_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "backup_id": "7ffbf305376b4cbea0ae491257b6aaf9br07",
  "type": "backup"
}
```

- 按时间点恢复到当前实例。

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

{
  "target_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "source_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "restore_time": 1673852043000,
  "type": "timestamp"
}
```

- 按备份文件恢复到已有实例。

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

{
  "target_instance_id": "7033e7c3cf93438797d44ad7ae0a7d95in07",
  "source_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "backup_id": "be4ddfd7e2b94640b5e2cb44efb30b22br07",
  "type": "backup"
}
```

- 按时间点恢复到已有实例。

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

{
  "target_instance_id": "7033e7c3cf93438797d44ad7ae0a7d95in07",
  "source_instance_id": "690e08a7c3854c218df0e59de3b0c6cein07",
  "restore_time": 1673852043000,
  "type": "timestamp"
}
```

响应示例

状态码: 200

Success.

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

SDK 代码示例

SDK代码示例如下。

Java

- 按备份文件恢复到当前实例。

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

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

```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class RestoreOldInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        RestoreOldInstanceRequest request = new RestoreOldInstanceRequest();
        RestoreRequest body = new RestoreRequest();
        body.withType("backup");
        body.withBackupId("7ffbf305376b4cbea0ae491257b6aaf9br07");
        body.withSourceInstanceld("690e08a7c3854c218df0e59de3b0c6cein07");
        body.withTargetInstanceld("690e08a7c3854c218df0e59de3b0c6cein07");
        request.withBody(body);
        try {
            RestoreOldInstanceResponse response = client.restoreOldInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- 按时间点恢复到当前实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class RestoreOldInstanceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR_REGION>"))
    .build();
RestoreOldInstanceRequest request = new RestoreOldInstanceRequest();
RestoreRequest body = new RestoreRequest();
body.withType("timestamp");
body.withRestoreTime(1673852043000L);
body.withSourceInstanceld("690e08a7c3854c218df0e59de3b0c6cein07");
body.withTargetInstanceld("690e08a7c3854c218df0e59de3b0c6cein07");
request.withBody(body);
try {
    RestoreOldInstanceResponse response = client.restoreOldInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 按备份文件恢复到已有实例。

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
public class RestoreOldInstanceSolution {
```

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

```
        // In this example, AK and SK are stored in environment variables for authentication. Before
        running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        environment
```

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
RestoreOldInstanceRequest request = new RestoreOldInstanceRequest();
RestoreRequest body = new RestoreRequest();
body.withType("backup");
body.withBackupId("be4ddfd7e2b94640b5e2cb44efb30b22br07");
body.withSourceInstanceld("690e08a7c3854c218df0e59de3b0c6cein07");
body.withTargetInstanceld("7033e7c3cf93438797d44ad7ae0a7d95in07");
request.withBody(body);
try {
    RestoreOldInstanceResponse response = client.restoreOldInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 按时间点恢复到已有实例。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class RestoreOldInstanceSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        RestoreOldInstanceRequest request = new RestoreOldInstanceRequest();
        RestoreRequest body = new RestoreRequest();
        body.withType("timestamp");
        body.withRestoreTime(1673852043000L);
```

```
body.withSourceInstanceId("690e08a7c3854c218df0e59de3b0c6cein07");
body.withTargetInstanceId("7033e7c3cf93438797d44ad7ae0a7d95in07");
request.withBody(body);
try {
    RestoreOldInstanceResponse response = client.restoreOldInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 按备份文件恢复到当前实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestoreOldInstanceRequest()
        request.body = RestoreRequest(
            type="backup",
            backup_id="7ffbf305376b4cbea0ae491257b6aaf9br07",
            source_instance_id="690e08a7c3854c218df0e59de3b0c6cein07",
            target_instance_id="690e08a7c3854c218df0e59de3b0c6cein07"
        )
        response = client.restore_old_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 按时间点恢复到当前实例。

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestoreOldInstanceRequest()
        request.body = RestoreRequest(
            type="timestamp",
            restore_time=1673852043000,
            source_instance_id="690e08a7c3854c218df0e59de3b0c6cein07",
            target_instance_id="690e08a7c3854c218df0e59de3b0c6cein07"
        )
        response = client.restore_old_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 按备份文件恢复到已有实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestoreOldInstanceRequest()
        request.body = RestoreRequest(
```

```
        type="backup",
        backup_id="be4ddfd7e2b94640b5e2cb44efb30b22br07",
        source_instance_id="690e08a7c3854c218df0e59de3b0c6cein07",
        target_instance_id="7033e7c3cf93438797d44ad7ae0a7d95in07"
    )
    response = client.restore_old_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 按时间点恢复到已有实例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = RestoreOldInstanceRequest()
        request.body = RestoreRequest(
            type="timestamp",
            restore_time=1673852043000,
            source_instance_id="690e08a7c3854c218df0e59de3b0c6cein07",
            target_instance_id="7033e7c3cf93438797d44ad7ae0a7d95in07"
        )
        response = client.restore_old_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 按备份文件恢复到当前实例。

```
package main

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



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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestoreOldInstanceRequest{}
    backupIdRestoreRequest := "7ffbf305376b4cbea0ae491257b6aaf9br07"
    request.Body = &model.RestoreRequest{
        Type: "backup",
        BackupId: &backupIdRestoreRequest,
        SourceInstancId: "690e08a7c3854c218df0e59de3b0c6cein07",
        TargetInstancId: "690e08a7c3854c218df0e59de3b0c6cein07",
    }
    response, err := client.RestoreOldInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 按时间点恢复到当前实例。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
```

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

request := &model.RestoreOldInstanceRequest{}
restoreTimeRestoreRequest:= int64(1673852043000)
request.Body = &model.RestoreRequest{
    Type: "timestamp",
    RestoreTime: &restoreTimeRestoreRequest,
    SourceInstanceld: "690e08a7c3854c218df0e59de3b0c6cein07",
    TargetInstanceld: "690e08a7c3854c218df0e59de3b0c6cein07",
}
response, err := client.RestoreOldInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 按备份文件恢复到已有实例。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build()

    request := &model.RestoreOldInstanceRequest{}
    backupIdRestoreRequest:= "be4ddfd7e2b94640b5e2cb44efb30b22br07"
    request.Body = &model.RestoreRequest{
        Type: "backup",
        BackupId: &backupIdRestoreRequest,
        SourceInstanceld: "690e08a7c3854c218df0e59de3b0c6cein07",
        TargetInstanceld: "7033e7c3cf93438797d44ad7ae0a7d95in07",
    }
    response, err := client.RestoreOldInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 按时间点恢复到已有实例。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestoreOldInstanceRequest{
        restoreTimeRestoreRequest:= int64(1673852043000)
        request.Body = &model.RestoreRequest{
            Type: "timestamp",
            RestoreTime: &restoreTimeRestoreRequest,
            SourceInstanceld: "690e08a7c3854c218df0e59de3b0c6cein07",
            TargetInstanceld: "7033e7c3cf93438797d44ad7ae0a7d95in07",
        }
    }
    response, err := client.RestoreOldInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.7 查询可恢复时间段

功能介绍

查询实例的可恢复时间段。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/restore-time

表 4-336 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-337 Query 参数

参数	是否必选	参数类型	描述
date	否	String	所需查询的日期，为yyyy-mm-dd字符串格式，时区为UTC。

请求参数

表 4-338 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-339 响应 Body 参数

参数	参数类型	描述
restore_times	Array of RestoreTimeInfo objects	可恢复时间段列表。

表 4-340 RestoreTimeInfo

参数	参数类型	描述
start_time	Long	可恢复时间段的起始时间点，UNIX时间戳格式，单位是毫秒，时区是UTC。
end_time	Long	可恢复时间段的结束时间点，UNIX时间戳格式，单位是毫秒，时区是UTC。

状态码：400

表 4-341 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-342 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例在2023-01-31的可恢复时间段。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/restore-time?date=2023-01-31
```

响应示例

状态码：200

Success.

```
{  
  "restore_times" : [ {  
    "start_time" : 1675095500000,  
    "end_time" : 1675149246000  
  } ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowBackupRestoreTimeSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);
```

```
GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowBackupRestoreTimeRequest request = new ShowBackupRestoreTimeRequest();
request.withInstanceId("{instance_id}");
try {
    ShowBackupRestoreTimeResponse response = client.showBackupRestoreTime(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
```

```
gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.8 打开或关闭备份加密

功能介绍

打开或关闭备份加密。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/backups/encryption

表 4-343 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-344 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-345 请求 Body 参数

参数	是否必选	参数类型	描述
encryption_status	是	String	开启或关闭加密。不区分大小写。 取值范围： <ul style="list-style-type: none"> on: 开启。 off: 关闭。
type	否	String	加密类型。当前只支持kms。 开启加密时必传，关闭加密时不传。 不区分大小写。
kms_key_id	否	String	kms加密ID。加密时必传，关闭加密时候不传。 通过调用数据加密服务的 创建密钥接口 获取（响应参数的key_id即为加密ID）。

响应参数

状态码：200

表 4-346 响应 Body 参数

参数	参数类型	描述
encryption_status	String	备份加密状态。 取值范围： <ul style="list-style-type: none"> on: 开启状态。 off: 关闭状态。

状态码：400

表 4-347 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-348 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启备份加密

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption
```

```
{  
  "type" : "kms",  
  "kms_key_id" : "b82fa43f-f6e8-4ec4-9c31-231bc547c526",  
  "encryption_status" : "on"  
}
```

- 关闭备份加密

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption
```

```
{  
  "encryption_status" : "off"  
}
```

响应示例

状态码: 200

Success.

```
{  
  "encryption_status" : "on"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启备份加密

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ModifyBackupEncryptStatusSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ModifyBackupEncryptStatusRequest request = new ModifyBackupEncryptStatusRequest();
request.withInstanceId("{instance_id}");
BackupEncryptRequest body = new BackupEncryptRequest();
body.withEncryptionStatus(BackupEncryptRequest.EncryptionStatusEnum.fromValue("on"));
body.withKmsKeyId("b82fa43f-f6e8-4ec4-9c31-231bc547c526");
body.withType(BackupEncryptRequest.TypeEnum.fromValue("kms"));
request.withBody(body);
try {
    ModifyBackupEncryptStatusResponse response = client.modifyBackupEncryptStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 关闭备份加密

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

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
public class ModifyBackupEncryptStatusSolution {
```

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

```
        // In this example, AK and SK are stored in environment variables for authentication. Before
        running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        environment
```

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ModifyBackupEncryptStatusRequest request = new ModifyBackupEncryptStatusRequest();
request.withInstanceId("{instance_id}");
BackupEncryptRequest body = new BackupEncryptRequest();
body.withEncryptionStatus(BackupEncryptRequest.EncryptionStatusEnum.fromValue("off"));
request.withBody(body);
try {
    ModifyBackupEncryptStatusResponse response = client.modifyBackupEncryptStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 开启备份加密

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ModifyBackupEncryptStatusRequest()
        request.instance_id = "{instance_id}"
        request.body = BackupEncryptRequest(
            encryption_status="on",
            kms_key_id="b82fa43f-f6e8-4ec4-9c31-231bc547c526",
            type="kms"
        )
        response = client.modify_backup_encrypt_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
```

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

- 关闭备份加密

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ModifyBackupEncryptStatusRequest()
        request.instance_id = "{instance_id}"
        request.body = BackupEncryptRequest(
            encryption_status="off"
        )
        response = client.modify_backup_encrypt_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 开启备份加密

```
package main

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

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

```
projectId := "{project_id}"

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ModifyBackupEncryptStatusRequest{}
request.InstanceId = "{instance_id}"
kmsKeyIdBackupEncryptRequest := "b82fa43f-f6e8-4ec4-9c31-231bc547c526"
typeBackupEncryptRequest := model.GetBackupEncryptRequestTypeEnum().KMS
request.Body = &model.BackupEncryptRequest{
    EncryptionStatus: model.GetBackupEncryptRequestEncryptionStatusEnum().ON,
    KmsKeyId: &kmsKeyIdBackupEncryptRequest,
    Type: &typeBackupEncryptRequest,
}
response, err := client.ModifyBackupEncryptStatus(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 关闭备份加密

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ModifyBackupEncryptStatusRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.BackupEncryptRequest{
        EncryptionStatus: model.GetBackupEncryptRequestEncryptionStatusEnum().OFF,
    }
}
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.9 查询实例是否开启备份加密功能

功能介绍

查询实例是否开启备份加密功能。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/backups/encryption

表 4-349 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-350 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-351 响应 Body 参数

参数	参数类型	描述
encryption_status	String	备份加密状态。 取值范围： <ul style="list-style-type: none"> on：开启状态。 off：关闭状态。

状态码：400

表 4-352 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-353 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例是否开启备份加密

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/7033e7c3cf93438797d44ad7ae0a7d95in07/backups/encryption
```

响应示例

状态码：200

Success.

```
{
  "encryption_status" : "on"
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DescribeBackupEncryptStatusSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
DescribeBackupEncryptStatusRequest request = new DescribeBackupEncryptStatusRequest();
request.withInstanceId("{instance_id}");
try {
    DescribeBackupEncryptStatusResponse response = client.describeBackupEncryptStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

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

Go

```
package main

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

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.DescribeBackupEncryptStatusRequest{}  
    request.InstanceId = "{instance_id}"  
    response, err := client.DescribeBackupEncryptStatus(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.10 查询增量备份列表

功能介绍

查询增量备份列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/incremental-backups

表 4-354 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-355 Query 参数

参数	是否必选	参数类型	描述
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	String	查询记录数。默认为10，可取范围：10、20、50。
begin_time	否	String	查询开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。 “begin_time” 有值时，“end_time” 必选。
end_time	否	String	查询结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”，且大于查询开始时间。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。 “end_time” 有值时，“begin_time” 必选。

请求参数

表 4-356 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-357 响应 Body 参数

参数	参数类型	描述
backups	Array of IncrementalBackups objects	备份信息。
total_count	Long	备份文件的总数。

表 4-358 IncrementalBackups

参数	参数类型	描述
id	String	备份ID。
name	String	备份名称。
begin_time	String	备份开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。

参数	参数类型	描述
end_time	String	备份结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
size	Number	备份大小，(单位：KB)。
instance_id	String	实例ID。

状态码：400

表 4-359 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-360 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询时间段内（2022-07-06~2022-07-16）的增量备份列表。

```
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
```

响应示例

状态码：200

Success.

```
{  
  "backups": [ {  
    "id": "f0d2aea28d26t4848b8c84ed3fea1822fbr07",  
    "name": "GaussDBforMySQL--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  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowGaussMySQLIncrementalBackupListSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowGaussMySQLIncrementalBackupListRequest request = new  
        ShowGaussMySQLIncrementalBackupListRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ShowGaussMySQLIncrementalBackupListResponse response =  
            client.showGaussMySQLIncrementalBackupList(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```


Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

```
WithCredential(auth).
Build()

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.11 设置跨区域备份策略

功能介绍

设置跨区域备份策略。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/backups/offsite-policy

表 4-361 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID, 严格匹配UUID规则。

请求参数

表 4-362 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-363 请求 Body 参数

参数	是否必选	参数类型	描述
backup_policy	是	UpdateBackupOffsitePolicyInfo object	备份策略信息。

表 4-364 UpdateBackupOffsitePolicyInfo

参数	是否必选	参数类型	描述
open_auto_backup	是	Boolean	是否开启跨区域全量备份。 <ul style="list-style-type: none">true: 开启跨区域全量备份。false: 关闭跨区域全量备份。

参数	是否必选	参数类型	描述
open_incremental_backup	是	Boolean	是否开启跨区域增量备份。 <ul style="list-style-type: none">• true: 开启跨区域增量备份, 当open_auto_backup开启时才可以开启。• false: 关闭跨区域增量备份。
destination_project_id	是	String	设置跨区域备份策略的目标 project ID。 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
destination_region	是	String	设置跨区域备份策略的目标区域。
keep_days	是	Integer	指定已生成的备份文件可以保存的天数。 取值范围: 1 ~ 1825。

响应参数

状态码: 200

表 4-365 响应 Body 参数

参数	参数类型	描述
result	String	结果。

状态码: 400

表 4-366 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-367 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置跨区域备份策略。

```
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  
  }  
}
```

响应示例

状态码: 200

Success.

```
{  
  "result" : "SUCCESS"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置跨区域备份策略。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateBackupOffsitePolicySolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        environment variables and decrypted during use to ensure security.  
    }  
}
```

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateBackupOffsitePolicyRequest request = new UpdateBackupOffsitePolicyRequest();
request.withInstanceId("{instance_id}");
UpdateBackupOffsitePolicyRequestBody body = new UpdateBackupOffsitePolicyRequestBody();
UpdateBackupOffsitePolicyInfo backupPolicybody = new UpdateBackupOffsitePolicyInfo();
backupPolicybody.withOpenAutoBackup(true)
    .withOpenIncrementalBackup(false)
    .withDestinationProjectId("fd710c89089a448aa2e666ab15817090")
    .withDestinationRegion("cn-north-7")
    .withKeepDays(1);
body.withBackupPolicy(backupPolicybody);
request.withBody(body);
try {
    UpdateBackupOffsitePolicyResponse response = client.updateBackupOffsitePolicy(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

设置跨区域备份策略。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

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

try:
    request = UpdateBackupOffsitePolicyRequest()
    request.instance_id = "{instance_id}"
    backupPolicybody = UpdateBackupOffsitePolicyInfo(
        open_auto_backup=True,
        open_incremental_backup=False,
        destination_project_id="fd710c89089a448aa2e666ab15817090",
        destination_region="cn-north-7",
        keep_days=1
    )
    request.body = UpdateBackupOffsitePolicyRequestBody(
        backup_policy=backupPolicybody
    )
    response = client.update_backup_offsite_policy(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

设置跨区域备份策略。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateBackupOffsitePolicyRequest{}
    request.InstanceId = "{instance_id}"
    backupPolicybody := &model.UpdateBackupOffsitePolicyInfo{
        OpenAutoBackup: true,
        OpenIncrementalBackup: false,
        DestinationProjectId: "fd710c89089a448aa2e666ab15817090",
        DestinationRegion: "cn-north-7",
        KeepDays: int32(1),
    }
}
```

```
request.Body = &model.UpdateBackupOffsitePolicyRequestBody{
    BackupPolicy: backupPolicybody,
}
response, err := client.UpdateBackupOffsitePolicy(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.12 表级时间点恢复

功能介绍

表级时间点恢复。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/backups/restore/tables

表 4-368 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。
instance_id	是	String	参数解释: 实例ID，此参数是实例的唯一标识。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，后缀为in07，长度为36个字符。 默认取值: 不涉及。

请求参数

表 4-369 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释： 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制： 不涉及。 取值范围： 不涉及。 默认值： 不涉及。
X-Language	否	String	参数解释： 请求语言类型。 约束限制： 不涉及。 取值范围： <ul style="list-style-type: none">• en-us• zh-cn 默认值： en-us。

表 4-370 请求 Body 参数

参数	是否必选	参数类型	描述
restore_time	是	String	<p>参数解释： 备份时间点。</p> <p>约束限制： 格式为UNIX时间戳，单位是毫秒，时区为UTC标准时区。传参时需要将对应时区的时间转为标准时区对应的时间戳，比如，北京时区的时间点需要-8h后再转为时间戳。</p> <p>取值范围： 通过查询可恢复时间段获取。</p> <p>默认取值： 不涉及。</p>
restore_tables	是	Array of CreateRestoreDatabaseTableInfo objects	数据库信息。
last_table_info	否	String	<p>参数解释： 是否是最新库表。</p> <p>约束限制： 不涉及。</p> <p>取值范围：</p> <ul style="list-style-type: none"> • true: 是最新库表。 • false: 是恢复时间点库表。 <p>默认取值： false。</p>

表 4-371 CreateRestoreDatabaseTableInfo

参数	是否必选	参数类型	描述
database	是	String	参数解释: 数据库名称。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: false。
tables	是	Array of CreateRestoreTableInfo objects	表信息。

表 4-372 CreateRestoreTableInfo

参数	是否必选	参数类型	描述
old_name	是	String	参数解释: 恢复前表名。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: false。
new_name	是	String	参数解释: 恢复后表名。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: false

响应参数

状态码: 200

表 4-373 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-374 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-375 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

表级时间点恢复。

```
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"  
    } ]  
  } ]  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id": "9c77973c-9332-4f8e-bb4d-b76760dbc9b2"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

表级时间点恢复。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

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

public class CreateRestoreTablesSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateRestoreTablesRequest request = new CreateRestoreTablesRequest();
        request.withInstanceId("{instance_id}");
        CreateRestoreTablesRequestBody body = new CreateRestoreTablesRequestBody();
        List<CreateRestoreTableInfo> listRestoreTablesTables = new ArrayList<>();
        listRestoreTablesTables.add(
            new CreateRestoreTableInfo()
                .withOldName("t3")
                .withNewName("t3_1690899914000")
        );
        List<CreateRestoreDatabaseTableInfo> listbodyRestoreTables = new ArrayList<>();
        listbodyRestoreTables.add(
            new CreateRestoreDatabaseTableInfo()
                .withDatabase("test_db_1")
                .withTables(listRestoreTablesTables)
        );
        body.withRestoreTables(listbodyRestoreTables);
        body.withLastTableInfo("true");
        body.withRestoreTime("1690890940000");
        request.withBody(body);
        try {
            CreateRestoreTablesResponse response = client.createRestoreTables(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
```

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

Python

表级时间点恢复。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateRestoreTablesRequest()
        request.instance_id = "{instance_id}"
        listTablesRestoreTables = [
            CreateRestoreTableInfo(
                old_name="t3",
                new_name="t3_1690899914000"
            )
        ]
        listRestoreTablesbody = [
            CreateRestoreDatabaseTableInfo(
                database="test_db_1",
                tables=listTablesRestoreTables
            )
        ]
        request.body = CreateRestoreTablesRequestBody(
            restore_tables=listRestoreTablesbody,
            last_table_info="true",
            restore_time="1690890940000"
        )
        response = client.create_restore_tables(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

表级时间点恢复。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateRestoreTablesRequest{}
    request.InstanceId = "{instance_id}"
    var listTablesRestoreTables = []model.CreateRestoreTableInfo{
        {
            OldName: "t3",
            NewName: "t3_1690899914000",
        },
    }
    var listRestoreTablesbody = []model.CreateRestoreDatabaseTableInfo{
        {
            Database: "test_db_1",
            Tables: listTablesRestoreTables,
        },
    }
    lastTableInfoCreateRestoreTablesRequestBody := "true"
    request.Body = &model.CreateRestoreTablesRequestBody{
        RestoreTables: listRestoreTablesbody,
        LastTableInfo: &lastTableInfoCreateRestoreTablesRequestBody,
        RestoreTime: "1690890940000",
    }
    response, err := client.CreateRestoreTables(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.4.13 查询表级时间点恢复可选表

功能介绍

查询表级时间点恢复可选表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/backups/restore/tables

表 4-376 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。

参数	是否必选	参数类型	描述
instance_id	是	String	<p>参数解释: 实例ID, 此参数是实例的唯一标识。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 只能由英文字母、数字组成, 后缀为in07, 长度为36个字符。</p> <p>默认取值: 不涉及。</p>

表 4-377 Query 参数

参数	是否必选	参数类型	描述
restore_time	是	String	<p>参数解释: 备份时间点。</p> <p>约束限制: 格式为UNIX时间戳, 单位是毫秒, 时区为UTC标准时区。传参时需要将对应时区的时间转为标准时区对应的时间戳, 比如, 北京时区的时间点需要-8h后再转为时间戳。</p> <p>取值范围: 通过查询可恢复时间段获取。</p> <p>默认取值: 不涉及。</p>
last_table_info	是	String	<p>参数解释: 是否是最新库表。</p> <p>约束限制: 不涉及。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • true: 是最新库表。 • false: 是恢复时间点库表。 <p>默认取值: 不涉及。</p>

参数	是否必选	参数类型	描述
database_name	否	String	<p>参数解释: 数据库名称, 模糊匹配。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认取值: 不涉及。</p>
table_name	否	String	<p>参数解释: 表名称, 模糊匹配。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认取值: 不涉及。</p>

请求参数

表 4-378 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释: 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>

参数	是否必选	参数类型	描述
X-Language	否	String	参数解释： 请求语言类型。 约束限制： 不涉及。 取值范围： <ul style="list-style-type: none"> • en-us • zh-cn 默认值： en-us。

响应参数

状态码：200

表 4-379 响应 Body 参数

参数	参数类型	描述
total_databases	Integer	数据库总数。
databases	Array of RestoreDatabaseInfos objects	数据库信息。

表 4-380 RestoreDatabaseInfos

参数	参数类型	描述
name	String	数据库名称。
total_tables	Integer	总表数。
tables	Array of RestoreDatabaseTableInfo objects	表信息。

表 4-381 RestoreDatabaseTableInfo

参数	参数类型	描述
name	String	表名。

状态码：400

表 4-382 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-383 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询表级时间点恢复可选表。

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
61a4ea66210545909d74a05c27a7179ein07/backups/restore/tables?  
database_name=test&last_table_info=true&restore_time=1690890940000&table_name=t
```

响应示例

状态码：200

Success.

```
{  
  "total_databases" : 1,  
  "databases" : [ {  
    "name" : "test_db_1",  
    "total_tables" : 1,  
    "tables" : [ {  
      "name" : "t3"  
    } ]  
  } ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
```

```
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowRestoreTablesSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowRestoreTablesRequest request = new ShowRestoreTablesRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowRestoreTablesResponse response = client.showRestoreTables(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```

```
.build()

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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5 参数模板管理

4.5.1 查询参数模板

功能介绍

获取参数模板列表，包括所有数据库的默认参数模板和用户创建的参数模板。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/configurations

表 4-384 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释： 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，且长度为32个字符。 默认值： 不涉及。

表 4-385 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	参数解释: 索引位置, 偏移量。从第一条数据偏移offset条数据后开始查询。 约束限制: 必须为整数, 不能为负数。 取值范围: ≥0 默认取值: 0
limit	否	Integer	参数解释: 查询记录数。 约束限制: 必须为整数, 不能为负数。 取值范围: 1-100 默认取值: 100

请求参数

表 4-386 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释: 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。

参数	是否必选	参数类型	描述
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none"> • en-us • zh-cn 默认值: en-us。

响应参数

状态码: 200

表 4-387 响应 Body 参数

参数	参数类型	描述
configurations	Array of ConfigurationSummary objects	参数解释: 参数模板信息。
total_count	Integer	参数解释: 参数模板的总数。 取值范围: ≥0

表 4-388 ConfigurationSummary

参数	参数类型	描述
id	String	参数解释: 参数组ID。 取值范围: 只能由英文字母、数字组成, 前面为UUID, 后缀为pr07, 长度为36个字符。
name	String	参数解释: 参数组名称。 取值范围: 不涉及。

参数	参数类型	描述
datastore_version_name	String	参数解释: 数据库版本。 取值范围: 8.0
datastore_name	String	参数解释: 数据库名称。 取值范围: GaussDB(for MySQL)
created	String	参数解释: 参数组创建时间, 格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
updated	String	参数解释: 参数组更新时间, 格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
user_defined	Boolean	参数解释: 是否是用户自定义参数模板 取值范围: <ul style="list-style-type: none"> • false: 表示为系统默认参数模板。 • true: 表示为用户自定义参数模板。
description	String	参数解释: 参数组描述。 取值范围: 不涉及。

状态码: 400

表 4-389 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-390 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询参数模板。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/configurations?offset=0&limit=2
```

响应示例

状态码：200

Success.

```
{
  "total_count": 101,
  "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
  }
  ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListGaussMySQLConfigurationsSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListGaussMySQLConfigurationsRequest request = new ListGaussMySQLConfigurationsRequest();
        try {
            ListGaussMySQLConfigurationsResponse response = client.listGaussMySQLConfigurations(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = ListGaussMySQLConfigurationsRequest()
    response = client.list_gauss_my_sql_configurations(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.2 创建参数模板

功能介绍

创建参数模板信息，包含参数模板名称、描述、数据库版本信息、参数值。

接口约束

- 该接口支持TaurusDB主备-独享版。
- 创建参数模板的名称“name”不能与默认参数模板或已有参数模板的名称重复，并且区分大小写。
- 创建参数模板的“parameter_values”参数必须在指定数据库版本的默认参数范围内。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/configurations

表 4-391 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-392 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-393 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	参数模板名称。 取值范围：长度1到64个字符之间，区分大小写字母，可包含字母、数字、中划线、下划线或句点，不能包含其他特殊字符。
description	否	String	参数模板描述。默认为空。 取值范围：长度不超过256个字符，且不能包含回车和特殊字符！<"='>&。
parameter_values	否	Map<String,String>	参数名和参数值映射关系。用户可以基于默认参数模板的参数，自定义的参数值。
datastore	否	DatastoreResult object	数据库对象。

表 4-394 DatastoreResult

参数	是否必选	参数类型	描述
type	是	String	数据库引擎，现在只支持gaussdb-mysql。

参数	是否必选	参数类型	描述
version	是	String	数据库版本。数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。

响应参数

状态码：200

表 4-395 响应 Body 参数

参数	参数类型	描述
configurations	ConfigurationSummary2 object	参数模板信息。

表 4-396 ConfigurationSummary2

参数	参数类型	描述
id	String	参数组ID。
name	String	参数组名称。
description	String	参数组描述。
datastore	DatastoreResult object	数据库对象。
created	String	创建时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量。
updated	String	更新时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量。

表 4-397 DatastoreResult

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。

参数	参数类型	描述
version	String	数据库版本。数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。

状态码：400

表 4-398 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-399 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建参数模板，账户允许最大同时连接数为10。

```
POST https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/configurations
```

```
{
  "name": "myparameter",
  "description": "parameter1",
  "datastore": {
    "type": "gaussdb-mysql",
    "version": "8.0"
  },
  "parameter_values": {
    "max_user_connections": "10"
  }
}
```

响应示例

状态码：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"
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建参数模板，账户允许最大同时连接数为10。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.Map;
import java.util.HashMap;

public class CreateGaussMySQLConfigurationSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLConfigurationRequest request = new CreateGaussMySQLConfigurationRequest();
        CreateConfigurationRequestBody body = new CreateConfigurationRequestBody();
        DatastoreResult datastorebody = new DatastoreResult();
        datastorebody.withType("gaussdb-mysql")
            .withVersion("8.0");
        Map[String]String listbodyParameterValues = new HashMap<>();
        listbodyParameterValues.put("max_user_connections", "10");
        body.withDatastore(datastorebody);
        body.withParameterValues(listbodyParameterValues);
        body.withDescription("parameter1");
        body.withName("myparameter");
        request.withBody(body);
        try {
```

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

Python

创建参数模板，账户允许最大同时连接数为10。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = CreateGaussMySqlConfigurationRequest()
        datastorebody = DatastoreResult(
            type="gaussdb-mysql",
            version="8.0"
        )
        listParameterValuesbody = {
            "max_user_connections": "10"
        }
        request.body = CreateConfigurationRequestBody(
            datastore=datastorebody,
            parameter_values=listParameterValuesbody,
            description="parameter1",
            name="myparameter"
        )
        response = client.create_gauss_my_sql_configuration(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

创建参数模板，账户允许最大同时连接数为10。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySQLConfigurationRequest{}
    dataStorebody := &model.DataStoreResult{
        Type: "gaussdb-mysql",
        Version: "8.0",
    }
    var listParameterValuesbody = map[string]string{
        "max_user_connections": "10",
    }
    descriptionCreateConfigurationRequestBody := "parameter1"
    request.Body = &model.CreateConfigurationRequestBody{
        DataStore: dataStorebody,
        ParameterValues: listParameterValuesbody,
        Description: &descriptionCreateConfigurationRequestBody,
        Name: "myparameter",
    }
    response, err := client.CreateGaussMySQLConfiguration(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.3 删除参数模板

功能介绍

删除指定参数模板。

接口约束

- 该接口仅支持TaurusDB。
- 默认参数模板不允许删除。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/configurations/{configuration_id}

表 4-400 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	参数模板ID。 获取方法参见 查询参数模板 。

请求参数

表 4-401 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-402 响应 Body 参数

参数	参数类型	描述
configuration_id	String	参数模板ID。
configuration_name	String	参数模板名称。

状态码：400

表 4-403 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-404 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除参数模板。

```
DELETE https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/configurations/  
7a03529134944a8498512a356ece8451pr07
```

响应示例

状态码: 200

Success.

```
{  
  "configuration_id" : "7a03529134944a8498512a356ece8451pr07",  
  "configuration_name" : "myparameter"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class DeleteGaussMySQLConfigurationSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()
```



```
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
DeleteGaussMySqlConfigurationRequest request = new DeleteGaussMySqlConfigurationRequest();
request.withConfigurationId("{configuration_id}");
try {
    DeleteGaussMySqlConfigurationResponse response =
client.deleteGaussMySqlConfiguration(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = DeleteGaussMySqlConfigurationRequest()
        request.configuration_id = "{configuration_id}"
        response = client.delete_gauss_my_sql_configuration(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.4 获取参数模板详情

功能介绍

获取指定参数模板的参数信息。

接口约束

该接口支持TaurusDB主备-独享版。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/configurations/{configuration_id}

表 4-405 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	参数模板ID。 获取方法参见 查询参数模板 。

请求参数

表 4-406 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-407 响应 Body 参数

参数	参数类型	描述
configurations	ConfigurationSummary2 object	参数模板信息。
parameter_values	Map<String,String>	参数名和参数值映射关系。用户可以基于默认参数模板的参数，自定义的参数值。

表 4-408 ConfigurationSummary2

参数	参数类型	描述
id	String	参数组ID。
name	String	参数组名称。
description	String	参数组描述。
datastore	DatastoreResult object	数据库对象。
created	String	创建时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量。
updated	String	更新时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。 其中，T指某个时间的开始；Z指时区偏移量。

表 4-409 DatastoreResult

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。

状态码：400

表 4-410 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-411 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取参数模板详情。

```
GET https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/  
43570e0de32e40c5a15f831aa5ce4176pr07
```

响应示例

状态码：200

Success.

```
{  
  "configurations" : {  
    "id" : "43570e0de32e40c5a15f831aa5ce4176pr07",  
    "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" : {  
    "auto_increment_increment" : "1",  
    "auto_increment_offset" : 1,  
    "binlog_checksum" : "CRC32",  
    "character_set_server" : "utf8",  
    "connect_timeout" : 10,  
    "default_authentication_plugin" : "mysql_native_password",  
    "default_week_format" : 0,  
    "div_precision_increment" : 4,  
    "end_markers_in_json" : "OFF",  
    "innodb_autoextend_increment" : 64,  
    "innodb_autoinc_lock_mode" : 2,  
    "innodb_concurrency_tickets" : 5000,  
    "innodb_default_row_format" : "DYNAMIC",  
    "innodb_flush_log_at_timeout" : 1,  
    "innodb_flush_log_at_trx_commit" : 1,  
  }
```

```
"innodb_flush_neighbors" : 0,
"innodb_max_undo_log_size" : 1073741824,
"innodb_optimize_fulltext_only" : "OFF",
"innodb_purge_batch_size" : 300,
"innodb_purge_threads" : 4,
"innodb_sort_buffer_size" : 1048576,
"innodb_spin_wait_delay" : 6,
"innodb_status_output" : "OFF",
"innodb_status_output_locks" : "OFF",
"innodb_strict_mode" : "OFF",
"innodb_sync_array_size" : 1,
"innodb_sync_spin_loops" : 30,
"innodb_thread_concurrency" : 0,
"innodb_thread_sleep_delay" : 10000,
"interactive_timeout" : 28800,
"local_infile" : "OFF",
"lock_wait_timeout" : 31536000,
"log_queries_not_using_indexes" : "OFF",
"log_throttle_queries_not_using_indexes" : 0,
"long_query_time" : 10,
"low_priority_updates" : "OFF",
"max_connect_errors" : 100,
"max_error_count" : 1024,
"max_prepared_stmt_count" : 16382,
"max_sp_recursion_depth" : 0,
"max_user_connections" : 0,
"max_write_lock_count" : 102400,
"net_buffer_length" : 16384,
"net_read_timeout" : 30,
"net_retry_count" : 10,
"net_write_timeout" : 60,
"password_history" : 0,
"password_require_current" : "OFF",
"password_reuse_interval" : 0,
"performance_schema" : "OFF",
"profiling_history_size" : 15,
"query_prealloc_size" : 8192,
"read_buffer_size" : 131072,
"read_rnd_buffer_size" : 262144,
"show_old_temporals" : "OFF",
"skip_name_resolve" : "ON",
"slow_launch_time" : 2,
"sql_mode" : null,
"table_open_cache" : 8192,
"table_open_cache_instances" : 16,
"thread_cache_size" : 1024,
"thread_stack" : 286720,
"transaction_isolation" : "REPEATABLE-READ",
"updatable_views_with_limit" : "YES",
"wait_timeout" : 28800,
"temptable_max_mmap" : 1073741824,
"default_password_lifetime" : 0,
"max_allowed_packet" : 1073741824,
"binlog_expire_logs_seconds" : 3600,
"max_binlog_cache_size" : 18446744073709547520,
"binlog_cache_size" : 32768,
"group_concat_max_len" : 1024,
"max_binlog_size" : 67108864,
"log_bin_trust_function_creators" : "ON",
"explicit_defaults_for_timestamp" : "ON",
"threadpool_stall_limit" : 50,
"time_zone" : "SYSTEM",
"rds_warn_max_binlog_cache_size" : 18446744073709547520,
"default_collation_for_utf8mb4" : "utf8mb4_0900_ai_ci",
"idle_transaction_timeout" : 0,
"idle_readonly_transaction_timeout" : 0,
"idle_write_transaction_timeout" : 0,
"block_encryption_mode" : "aes-256-cbc",
"innodb_lock_wait_timeout" : 50,
```

```
"collation_server" : "utf8_general_ci",
"innodb_read_ahead_threshold" : 56,
"innodb_random_read_ahead" : "OFF",
"eq_range_index_dive_limit" : 10,
"sort_buffer_size" : 1048576,
"join_buffer_size" : 524288,
"range_optimizer_max_mem_size" : 16777216,
"strict_status_check_RTO_time" : 30,
"long_trx_decision_time" : 300,
"mount_vip_when_failover" : "ON",
"force_parallel_execute" : "OFF",
"parallel_cost_threshold" : 1000,
"parallel_default_dop" : 4,
"parallel_max_threads" : 64,
"parallel_memory_limit" : 104857600,
"parallel_queue_timeout" : 0,
"threadpool_oversubscribe" : 3,
"binlog_gtid_simple_recovery" : "ON",
"log_slave_updates" : "ON",
"binlog_rows_query_log_events" : "OFF",
"log-bin" : "ON",
"gtid_mode" : "ON",
"enforce_gtid_consistency" : "ON",
"innodb_online_alter_log_max_size" : 134217728,
"rds_sql_tracer_max_record_size" : 4096,
"innodb_parallel_select_count" : "ON",
"max_execution_time" : 0,
"rds_sqlfilter_case_sensitive" : "OFF",
"strict_status_check" : "ON",
"rds_ddl_lock_wait_timeout" : 31536000
}
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySQLConfigurationSolution {

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

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

```
GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowGaussMySqlConfigurationRequest request = new ShowGaussMySqlConfigurationRequest();
request.withConfigurationId("{configuration_id}");
try {
    ShowGaussMySqlConfigurationResponse response = client.showGaussMySqlConfiguration(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowGaussMySqlConfigurationRequest()
        request.configuration_id = "{configuration_id}"
        response = client.show_gauss_my_sql_configuration(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
)
```



```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.5 修改参数模板

功能介绍

修改指定参数模板的参数信息，包括名称、描述、指定参数的值。

接口约束

- 该接口仅支持TaurusDB主备-独享版。
- 默认参数模板不允许修改。
- 修改参数模板名称“name”不能与默认参数模板名称重复。
- 修改的参数必须在指定数据库版本的默认参数范围内。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/configurations/{configuration_id}

表 4-412 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	参数模板ID。 获取方法参见 查询参数模板 。

请求参数

表 4-413 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">• en-us• zh-cn

表 4-414 请求 Body 参数

参数	是否必选	参数类型	描述
name	否	String	参数模板名称。 取值范围：长度1到64个字符之间，区分大小写字母，可包含字母、数字、中划线、下划线或句点，不能包含其他特殊字符。参数模板描述，参数名和参数值映射关系三项不能同时为空。
description	否	String	参数模板描述。默认为空。取值范围：长度不超过256个字符，且不能包含回车和特殊字符！<" = ' > &。
parameter_values	否	Map<String,String>	参数名和参数值映射关系。用户可以基于默认参数模板的参数，自定义的参数值。不传入该参数，则保持原参数信息。

响应参数

状态码：200

表 4-415 响应 Body 参数

参数	参数类型	描述
job_id	String	修改参数模板的任务ID。

状态码：400

表 4-416 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-417 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改参数模板。

```
PUT https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/  
7a8d539ba30f43adaf1b16d08b1df4bdpr07  
  
{  
  "parameter_values": {  
    "max_user_connections": "4"  
  }  
}
```

响应示例

状态码: 200

Success.

```
{  
  "job_id": "f6cb21fe-186a-4931-b20d-764ced1f1f6b"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改参数模板。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.Map;  
import java.util.HashMap;  
  
public class UpdateGaussMySQLConfigurationSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateGaussMySQLConfigurationRequest request = new UpdateGaussMySQLConfigurationRequest();
request.withConfigurationId("{configuration_id}");
UpdateConfigurationParameterRequestBody body = new
UpdateConfigurationParameterRequestBody();
Map<String, String> listbodyParameterValues = new HashMap<>();
listbodyParameterValues.put("max_user_connections", "4");
body.withParameterValues(listbodyParameterValues);
request.withBody(body);
try {
    UpdateGaussMySQLConfigurationResponse response =
client.updateGaussMySQLConfiguration(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

修改参数模板。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
```

```
request = UpdateGaussMySqlConfigurationRequest()
request.configuration_id = "{configuration_id}"
listParameterValuesbody = {
    "max_user_connections": "4"
}
request.body = UpdateConfigurationParameterRequestBody(
    parameter_values=listParameterValuesbody
)
response = client.update_gauss_my_sql_configuration(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改参数模板。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySqlConfigurationRequest{}
    request.ConfigurationId = "{configuration_id}"
    var listParameterValuesbody = map[string]string{
        "max_user_connections": "4",
    }
    request.Body = &model.UpdateConfigurationParameterRequestBody{
        ParameterValues: listParameterValuesbody,
    }
    response, err := client.UpdateGaussMySqlConfiguration(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.6 应用参数模板

功能介绍

指定实例变更参数模板。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/configurations/{configuration_id}/apply

表 4-418 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	参数模板ID。 获取方法参见 查询参数模板 。

请求参数

表 4-419 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

表 4-420 请求 Body 参数

参数	是否必选	参数类型	描述
instance_ids	是	Array of strings	实例ID列表。列表长度限制在10以内。

响应参数

状态码：200

表 4-421 响应 Body 参数

参数	参数类型	描述
job_id	String	应用参数模板的任务ID。

状态码：400

表 4-422 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-423 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

应用参数模板。

```
PUT https://{endpoint}/v3/0549b4a43100d4f32f51c01c2fe4acdb/configurations/  
7a8d539ba30f43adaf1b16d08b1df4bdpr07/apply  
  
{  
  "instance_ids" : [ "1c3f12d626824d4ca357104def25a455in07" ]  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id" : "bf26cf3c-d046-4080-bb45-f114be7afa5f"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

应用参数模板。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class SwitchGaussMySQLConfigurationSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

SwitchGaussMySQLConfigurationRequest request = new SwitchGaussMySQLConfigurationRequest();
request.withConfigurationId("{configuration_id}");
ApplyConfigurationRequestBody body = new ApplyConfigurationRequestBody();
List<String> listbodyInstanceIds = new ArrayList<>();
listbodyInstanceIds.add("1c3f12d626824d4ca357104def25a455in07");
body.withInstanceIds(listbodyInstanceIds);
request.withBody(body);
try {
    SwitchGaussMySQLConfigurationResponse response =
client.switchGaussMySQLConfiguration(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

应用参数模板。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
```

```
request = SwitchGaussMySqlConfigurationRequest()
request.configuration_id = "{configuration_id}"
listInstanceIdsbody = [
    "1c3f12d626824d4ca357104def25a455in07"
]
request.body = ApplyConfigurationRequestBody(
    instance_ids=listInstanceIdsbody
)
response = client.switch_gauss_my_sql_configuration(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

应用参数模板。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchGaussMySqlConfigurationRequest{}
    request.ConfigurationId = "{configuration_id}"
    var listInstanceIdsbody = []string{
        "1c3f12d626824d4ca357104def25a455in07",
    }
    request.Body = &model.ApplyConfigurationRequestBody{
        InstanceIds: listInstanceIdsbody,
    }
    response, err := client.SwitchGaussMySqlConfiguration(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.7 复制参数组

功能介绍

复制参数组。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/configurations/{configuration_id}/copy

表 4-424 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	自定义的参数组ID。 通过调用 查询参数模板 接口获取。 请求响应成功后在响应消息体中包含的“id”的值即为configuration_id值，需要传入user_defined为ture的configuration_id值。

请求参数

表 4-425 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-426 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	复制后的参数模板名称。 取值范围：长度1到64个字符之间，区分大小写字母，可包含字母、数字、中划线、下划线或句点，不能包含其他特殊字符。
description	否	String	复制后的参数模板描述。默认为空。 取值范围：长度不超过256位，且不能包含回车和>!"&'=特殊字符。

响应参数

状态码：200

表 4-427 响应 Body 参数

参数	参数类型	描述
configuration_id	String	参数模板ID。

状态码：400

表 4-428 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-429 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

复制参数组。

```
post https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/a2069d40256f40078c52d90d6a91ee63pr07/copy
{
  "name" : "paramTemplate-new",
  "description" : "new-parameter-group"
}
```

响应示例

状态码: 200

Success.

```
{
  "configuration_id" : "7b4e07852bd54016906e89461b3182cdpr02"
}
```

SDK 代码示例

SDK代码示例如下。

Java

复制参数组。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
```

```
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CopyConfigurationsSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CopyConfigurationsRequest request = new CopyConfigurationsRequest();
        request.withConfigurationId("{configuration_id}");
        CopyConfigurationsRequestBody body = new CopyConfigurationsRequestBody();
        body.withDescription("new-parameter-group");
        body.withName("paramTemplate-new");
        request.withBody(body);
        try {
            CopyConfigurationsResponse response = client.copyConfigurations(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

复制参数组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

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

try:
    request = CopyConfigurationsRequest()
    request.configuration_id = "{configuration_id}"
    request.body = CopyConfigurationsRequestBody(
        description="new-parameter-group",
        name="paramTemplate-new"
    )
    response = client.copy_configurations(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

复制参数组。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CopyConfigurationsRequest{
        ConfigurationId: "{configuration_id}"
        descriptionCopyConfigurationsRequestBody: "new-parameter-group"
    }
    request.Body = &model.CopyConfigurationsRequestBody{
        Description: &descriptionCopyConfigurationsRequestBody,
        Name: "paramTemplate-new",
    }
    response, err := client.CopyConfigurations(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    }
}
```



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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.8 对比参数模板

功能介绍

比较两个参数模板之间的差异。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/configurations/comparison

表 4-430 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-431 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-432 请求 Body 参数

参数	是否必选	参数类型	描述
source_configuration_id	是	String	需要进行比较的源参数模板ID。 通过调用 查询参数模板 接口获取。 请求响应成功后在响应消息体中包含的“id”的值即为source_configuration_id值。
target_configuration_id	是	String	需要进行比较的目标参数模板ID。 通过调用 查询参数模板 接口获取。 请求响应成功后在响应消息体中包含的“id”的值即为target_configuration_id值。

响应参数

状态码：200

表 4-433 响应 Body 参数

参数	参数类型	描述
differences	Array of ParamGroupParameterDifferences objects	参数之间的区别集合。

表 4-434 ParamGroupParameterDifferences

参数	参数类型	描述
parameter_name	String	参数名称。
source_value	String	源参数模板中的参数值。
target_value	String	目标参数模板中的参数值。

状态码：400

表 4-435 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-436 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

对比参数组。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/comparison
{
  "source_configuration_id": "a2069d40256f40078c52d90d6a91ee63pr07",
  "target_configuration_id": "0cd8ef851dc4422f98e7717205ed13e6pr07"
}
```

响应示例

状态码：200

Success.

```
{
  "differences" : [ {
    "parameter_name" : "innodb_purge_threads",
    "source_value" : 1,
    "target_value" : 4
  }, {
    "parameter_name" : "connect_timeout",
    "source_value" : 10,
    "target_value" : 20
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

对比参数组。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListConfigurationsDifferencesSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListConfigurationsDifferencesRequest request = new ListConfigurationsDifferencesRequest();
        ListConfigurationsDifferencesRequestBody body = new ListConfigurationsDifferencesRequestBody();
        body.withTargetConfigurationId("0cd8ef851dc4422f98e7717205ed13e6pr07");
        body.withSourceConfigurationId("a2069d40256f40078c52d90d6a91ee63pr07");
        request.withBody(body);
        try {
            ListConfigurationsDifferencesResponse response = client.listConfigurationsDifferences(request);
            System.out.println(response.toString());
        }
    }
}
```

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

Python

对比参数组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListConfigurationsDifferencesRequest()
        request.body = ListConfigurationsDifferencesRequestBody(
            target_configuration_id="0cd8ef851dc4422f98e7717205ed13e6pr07",
            source_configuration_id="a2069d40256f40078c52d90d6a91ee63pr07"
        )
        response = client.list_configurations_differences(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

对比参数组。

```
package main

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

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConfigurationsDifferencesRequest{}
    request.Body = &model.ListConfigurationsDifferencesRequestBody{
        TargetConfigurationId: "0cd8ef851dc4422f98e7717205ed13e6pr07",
        SourceConfigurationId: "a2069d40256f40078c52d90d6a91ee63pr07",
    }
    response, err := client.ListConfigurationsDifferences(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.9 查询可应用的实例列表

功能介绍

查询指定参数模板可被应用的实例。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/configurations/{configuration_id}/applicable-instances

表 4-437 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
configuration_id	是	String	参数模板ID。 通过调用 查询参数模板 接口获取。 请求响应成功后在响应消息体中包含的“id”的值即为configuration_id值。

表 4-438 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-439 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-440 响应 Body 参数

参数	参数类型	描述
instances	Array of ApplicableInstances objects	可以应用的实例列表。
total_count	Integer	可应用的实例列表数量。

表 4-441 ApplicableInstances

参数	参数类型	描述
instance_id	String	实例ID。
instance_name	String	实例名称。

状态码：400

表 4-442 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-443 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询可应用该模板参数组的实例列表。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/  
0c82974e2354466098d7b4b72e55129dpr07/applicable-instances
```

响应示例

状态码：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"  
  }  
]
```

```
    }]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListConfigurationsInstancesSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListConfigurationsInstancesRequest request = new ListConfigurationsInstancesRequest();  
        request.withConfigurationId("{configuration_id}");  
        try {  
            ListConfigurationsInstancesResponse response = client.listConfigurationsInstances(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials
```

```
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListConfigurationsInstancesRequest()
        request.configuration_id = "{configuration_id}"
        response = client.list_configurations_instances(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListConfigurationsInstancesRequest{}
    request.ConfigurationId = "{configuration_id}"
    response, err := client.ListConfigurationsInstances(request)
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.10 查询参数修改历史

功能介绍

查询参数修改历史。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/configurations/{configuration_id}/modify-history

表 4-444 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

参数	是否必选	参数类型	描述
configuration_id	是	String	参数组ID。 通过调用 查询实例详情信息 接口获取。 请求响应成功后在响应消息体中包含的“configuration_id”的值即为configuration_id值。

表 4-445 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-446 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-447 响应 Body 参数

参数	参数类型	描述
total_count	Integer	总数。
histories	Array of ParamGroupHistoryResponse objects	参数模板的修改历史列表。

表 4-448 ParamGroupHistoryResponse

参数	参数类型	描述
parameter_name	String	参数名称。
old_value	String	修改前参数值。
new_value	String	修改后参数值。
update_result	String	更新结果。
is_applied	Boolean	是否应用。 <ul style="list-style-type: none">• true: 是。• false: 否。
updated	String	修改时间。格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
applied	String	应用时间。格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。

状态码：400

表 4-449 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-450 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询参数组的修改历史。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/7625c6a12d884be1891c61d921e0e114pr07/modify-history
```

响应示例

状态码: 200

Success.

```
{
  "total_count": 2,
  "histories": [ {
    "parameter_name": "binlog_rows_query_log_events",
    "old_value": "OFF",
    "new_value": "ON",
    "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"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListModifyHistorySolution {
```

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

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

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    ListModifyHistoryRequest request = new ListModifyHistoryRequest();
    request.withConfigurationId("{configuration_id}");
    try {
        ListModifyHistoryResponse response = client.listModifyHistory(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListModifyHistoryRequest()
        request.configuration_id = "{configuration_id}"
        response = client.list_modify_history(request)
```



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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.11 获取指定实例的参数信息

功能介绍

获取指定实例的参数信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/configurations

表 4-451 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释： 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，且长度为32个字符。 默认值： 不涉及。
instance_id	是	String	参数解释： 实例ID，此参数是实例的唯一标识。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，后缀为in07，长度为36个字符。 默认取值： 不涉及。

表 4-452 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	参数解释: 索引位置, 偏移量。从第一条数据偏移offset条数据后开始查询。 约束限制: 必须为整数, 不能为负数。 取值范围: ≥0 默认取值: 0
limit	否	Integer	参数解释: 查询记录数。 约束限制: 必须为整数, 不能为负数。 取值范围: 1-100 默认取值: 100

请求参数

表 4-453 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释: 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。

参数	是否必选	参数类型	描述
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none"> • en-us • zh-cn 默认值: en-us。

响应参数

状态码: 200

表 4-454 响应 Body 参数

参数	参数类型	描述
configurations	ParameterConfigurationInfo object	参数解释: 实例参数组信息。
total_count	Long	参数解释: 实例参数总数。 取值范围: ≥0
parameter_values	Array of ParameterValuesInfo objects	参数解释: 实例参数信息。

表 4-455 ParameterConfigurationInfo

参数	参数类型	描述
datastore_version_name	String	参数解释: 数据库版本名称。 取值范围: 2.0

参数	参数类型	描述
datastore_name	String	参数解释: 参数组引擎名称。 取值范围: taurus
created	String	参数解释: 参数组创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
updated	String	参数解释: 参数组更新时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。

表 4-456 ParameterValuesInfo

参数	参数类型	描述
name	String	参数解释: 参数名称。 取值范围: 不涉及。
value	String	参数解释: 参数值。 取值范围: 不涉及。
restart_required	Boolean	参数解释: 是否需要重启。 取值范围: <ul style="list-style-type: none"> • false: 否。 • true: 是。

参数	参数类型	描述
readonly	Boolean	参数解释: 是否只读。 取值范围: <ul style="list-style-type: none">• false: 否。• true: 是。
value_range	String	参数解释: 参数值范围。 取值范围: 不涉及。
type	String	参数解释: 参数类型。 取值范围: <ul style="list-style-type: none">• string• integer• boolean• list• float
description	String	参数解释: 参数描述。 取值范围: 不涉及。

状态码：400

表 4-457 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-458 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

获取指定实例的参数信息。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/configurations
```

响应示例

状态码：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和auto_increment_offset 用于master-to-master的复制，并可以用  
用来控制AUTO_INCREMENT列的操作。"  
  }, {  
    "name" : "auto_increment_offset",  
    "value" : 1,  
    "restart_required" : false,  
    "readonly" : false,  
    "value_range" : "1-65535",  
    "type" : "integer",  
    "description" : "auto_increment_increment和auto_increment_offset用于master-to-master的复制，并可以用  
用来控制AUTO_INCREMENT列的操作。"  
  } ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
public class ListInstanceConfigurationsSolution {

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

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

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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



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

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.12 修改指定实例的参数

功能介绍

修改指定实例的参数。

调用方法

请参见[如何调用API](#)。

URI

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

表 4-459 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-460 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围: <ul style="list-style-type: none"> en-us zh-cn

表 4-461 请求 Body 参数

参数	是否必选	参数类型	描述
parameter_values	是	Map<String,String>	参数名和参数值映射关系。用户可以基于默认参数模板的参数,自定义的参数值。不传入该参数,则保持原参数信息。

响应参数

状态码: 200

表 4-462 响应 Body 参数

参数	参数类型	描述
job_id	String	修改指定实例参数的任务ID。
restart_required	Boolean	是否需要重启。 <ul style="list-style-type: none"> true: 是。 false: 否。

状态码: 400

表 4-463 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-464 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改指定实例的参数。

```
PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
3ef58db3986540d19f95151309368d34in07/configurations
```

```
{  
  "parameter_values": {  
    "max_user_connections": "100"  
  }  
}
```

响应示例

状态码: 200

Success.

```
{  
  "job_id": "e5d698a9-d8db-47d2-bf75-3c9018f72b6f",  
  "restart_required": false  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改指定实例的参数。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.Map;  
import java.util.HashMap;  
  
public class UpdateInstanceConfigurationsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

UpdateInstanceConfigurationsRequest request = new UpdateInstanceConfigurationsRequest();
request.withInstanceId("{instance_id}");
UpdateInstanceConfigurationsRequestBody body = new UpdateInstanceConfigurationsRequestBody();
Map<String, String> listbodyParameterValues = new HashMap<>();
listbodyParameterValues.put("max_user_connections", "100");
body.withParameterValues(listbodyParameterValues);
request.withBody(body);
try {
    UpdateInstanceConfigurationsResponse response = client.updateInstanceConfigurations(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改指定实例的参数。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateInstanceConfigurationsRequest()
```

```
request.instance_id = "{instance_id}"
listParameterValuesbody = {
    "max_user_connections": "100"
}
request.body = UpdateInstanceConfigurationsRequestBody(
    parameter_values=listParameterValuesbody
)
response = client.update_instance_configurations(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改指定实例的参数。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateInstanceConfigurationsRequest{}
    request.InstanceId = "{instance_id}"
    var listParameterValuesbody = map[string]string{
        "max_user_connections": "100",
    }
    request.Body = &model.UpdateInstanceConfigurationsRequestBody{
        ParameterValues: listParameterValuesbody,
    }
    response, err := client.UpdateInstanceConfigurations(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.13 复制实例参数组

功能介绍

复制实例参数组。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/configurations/{configuration_id}/copy

表 4-465 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
configuration_id	是	String	参数组ID。 通过调用 查询实例详情信息 接口获取。 请求响应成功后在响应消息体中包含的“configuration_id”的值即为configuration_id值。

请求参数

表 4-466 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-467 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	复制后的参数模板名称。 取值范围：长度1到64个字符之间，区分大小写字母，可包含字母、数字、中划线、下划线或句点，不能包含其他特殊字符。
description	否	String	复制后的参数模板描述。默认为空。 取值范围：描述不能超过256个字符，且不能包含回车和特殊字符! < " = ' > &。

响应参数

状态码：200

表 4-468 响应 Body 参数

参数	参数类型	描述
configuration_id	String	参数模板ID。

状态码：400

表 4-469 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-470 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

复制实例参数组。

```
POST https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/61a4ea66210545909d74a05c27a7179ein07/configurations/b26ab68e7a77495c8d84b92e4eaa33d3pr07/copy
{
  "name" : "paramTemplate-test-1",
  "description" : "test"
}
```

响应示例

状态码：200

Success.

```
{
  "configuration_id" : "c82d8c54c4c7416a946f58d9ee89ed8epr07"
}
```

SDK 代码示例

SDK代码示例如下。

Java

复制实例参数组。

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

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

```
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CopyInstanceConfigurationsSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CopyInstanceConfigurationsRequest request = new CopyInstanceConfigurationsRequest();
        request.withInstanceld("{instance_id}");
        request.withConfigurationId("{configuration_id}");
        CopyInstanceConfigurationsRequestBody body = new CopyInstanceConfigurationsRequestBody();
        body.withDescription("test");
        body.withName("paramTemplate-test-1");
        request.withBody(body);
        try {
            CopyInstanceConfigurationsResponse response = client.copyInstanceConfigurations(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

复制实例参数组。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

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

credentials = BasicCredentials(ak, sk, projectId)

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

try:
    request = CopyInstanceConfigurationsRequest()
    request.instance_id = "{instance_id}"
    request.configuration_id = "{configuration_id}"
    request.body = CopyInstanceConfigurationsRequestBody(
        description="test",
        name="paramTemplate-test-1"
    )
    response = client.copy_instance_configurations(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

复制实例参数组。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CopyInstanceConfigurationsRequest{
        request.InstanceId = "{instance_id}"
        request.ConfigurationId = "{configuration_id}"
        descriptionCopyInstanceConfigurationsRequestBody:= "test"
        request.Body = &model.CopyInstanceConfigurationsRequestBody{
```

```
Description: &descriptionCopyInstanceConfigurationsRequestBody,  
Name: "paramTemplate-test-1",  
}  
response, err := client.CopyInstanceConfigurations(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.5.14 查询参数模板应用记录

功能介绍

查询参数模板应用记录。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/configurations/{config_id}/apply-history

表 4-471 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
config_id	是	String	参数组ID。

表 4-472 Query 参数

参数	是否必选	参数类型	描述
limit	否	Integer	查询记录数。默认为10，不能为负数，最小值为1，最大值为100。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。

请求参数

表 4-473 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。

响应参数

状态码：200

表 4-474 响应 Body 参数

参数	参数类型	描述
total_count	String	应用记录数量。
histories	Array of TemplateApplyHistory objects	应用记录信息

表 4-475 TemplateApplyHistory

参数	参数类型	描述
target_id	String	应用实例ID。
target_name	String	应用实例名称。
apply_result	String	应用结果。
applied_at	Number	应用时间。
error_code	String	错误码。

状态码：400

表 4-476 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-477 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询参数模板应用记录。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/  
b366363c95b04b0eac39e73ea2672ffep07/apply-history
```

响应示例

状态码：200

Success.

```
{  
  "total_count": 1,  
  "histories": [{  
    "target_id": "06789bdfbe414d78b9cef1b79d7d9680in07",  
    "target_name": "gauss-11",  
    "apply_result": "SUCCESS",
```

```
"applied_at" : 1712246191000,  
"error_code" : ""  
}]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListParamsTemplateApplyHistorySolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListParamsTemplateApplyHistoryRequest request = new ListParamsTemplateApplyHistoryRequest();  
        request.withConfigId("{config_id}");  
        try {  
            ListParamsTemplateApplyHistoryResponse response =  
client.listParamsTemplateApplyHistory(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListParamsTemplateApplyHistoryRequest()
        request.config_id = "{config_id}"
        response = client.list_params_template_apply_history(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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



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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.6 配额管理

4.6.1 查询租户的实例配额

功能介绍

获取指定租户的资源配额。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/project-quotas

表 4-478 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。

表 4-479 Query 参数

参数	是否必选	参数类型	描述
type	否	String	参数解释: 根据type过滤查询指定类型的配额。 约束限制: 不涉及。 取值范围: instance。 默认值: instance。

请求参数

表 4-480 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	否	String	<p>参数解释： 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制： 不涉及。</p> <p>取值范围： 不涉及。</p> <p>默认值： 不涉及。</p>
X-Language	否	String	<p>参数解释： 请求语言类型。</p> <p>约束限制： 不涉及。</p> <p>取值范围：</p> <ul style="list-style-type: none"> en-us zh-cn <p>默认值： en-us。</p>

响应参数

状态码：200

表 4-481 响应 Body 参数

参数	参数类型	描述
quotas	project-quotas object	<p>参数解释： 租户实例配额信息。</p>

表 4-482 project-quotas

参数	参数类型	描述
resources	Array of resource objects	参数解释: 资源列表对象。

表 4-483 resource

参数	参数类型	描述
type	String	参数解释: 指定类型的配额。 取值范围: <ul style="list-style-type: none">instance。
used	Integer	参数解释: 已创建的资源个数。 取值范围: ≥0。
quota	Integer	参数解释: 资源最大的配额数。 取值范围: 实例个数配额, 取值范围0~100000, -1 表示无限制。

状态码: 400

表 4-484 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-485 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询租户的实例配额。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/project-quotas?type=instance
```

响应示例

状态码: 200

Success.

```
{
  "quotas": {
    "resources": [ {
      "type": "instance",
      "used": 4,
      "quota": 50
    } ]
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySQLProjectQuotasSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGaussMySQLProjectQuotasRequest request = new ShowGaussMySQLProjectQuotasRequest();
        try {
```

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

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ShowGaussMySqlProjectQuotasRequest()
        response = client.show_gauss_my_sql_project_quotas(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

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

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

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

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

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.6.2 查询租户基于企业项目的资源配额

功能介绍

获取指定企业项目的资源配额。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/quotas

表 4-486 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-487 Query 参数

参数	是否必选	参数类型	描述
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。 取值范围：0 - 10000
limit	否	String	查询记录数。默认为10，不能为负数，最小值为1，最大值为100。
enterprise_project_name	否	String	企业项目名称。

请求参数

表 4-488 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-489 响应 Body 参数

参数	参数类型	描述
quota_list	Array of quota objects	资源列表对象。
total_count	Integer	配额记录的条数。

表 4-490 quota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。
enterprise_project_name	String	企业项目名称。
instance_quota	Integer	实例个数配额，-1表示无限制。
vcpus_quota	Integer	CPU核数配额，-1表示无限制。
ram_quota	Integer	内存使用配额，单位为GB，-1表示无限制。
availability_instance_quota	Integer	实例剩余配额，-1表示无限制。
availability_vcpus_quota	Integer	CPU核数剩余配额，-1表示无限制。
availability_ram_quota	Integer	内存剩余配额，-1表示无限制。

状态码：400

表 4-491 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-492 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取资源配额。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
```

响应示例

状态码：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  
  } ],  
  "total_count": 1  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.6.3 设置租户基于企业项目的资源配额

功能介绍

设置指定企业项目的资源配额。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/quotas

表 4-493 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-494 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-495 请求 Body 参数

参数	是否必选	参数类型	描述
quota_list	是	Array of setQuota objects	资源列表对象。

表 4-496 setQuota

参数	是否必选	参数类型	描述
enterprise_project_id	是	String	企业项目ID。
instance_quota	否	Integer	实例个数配额。取值范围0~100000。(如果已经存在实例, 应该大于已经存在的实例个数)
vcpus_quota	否	Integer	CPU核数配额。取值范围0~2147483646。(如果已经存在实例, 应该大于已经占用的cpu个数)
ram_quota	否	Integer	内存使用配额, 单位为GB。取值范围0~2147483646。(如果已经存在实例, 应该大于已经占用的内存数)

响应参数

状态码: 200

表 4-497 响应 Body 参数

参数	参数类型	描述
quota_list	Array of setQuota objects	资源列表对象。

表 4-498 setQuota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。

参数	参数类型	描述
instance_quota	Integer	实例个数配额。取值范围0~100000。 (如果已经存在实例, 应该大于已经存在的实例个数)
vcpus_quota	Integer	CPU核数配额。取值范围 0~2147483646。(如果已经存在实例, 应该大于已经占用的cpu个数)
ram_quota	Integer	内存使用配额, 单位为GB。取值范围 0~2147483646。(如果已经存在实例, 应该大于已经占用的内存数)

状态码: 400

表 4-499 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-500 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置资源配额。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
```

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

响应示例

状态码: 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置资源配额。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

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

public class SetGaussMySQLQuotasSolution {

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

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

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SetGaussMySQLQuotasRequest request = new SetGaussMySQLQuotasRequest();
        SetQuotasRequestBody body = new SetQuotasRequestBody();
        List<SetQuota> listbodyQuotaList = new ArrayList<>();
        listbodyQuotaList.add(
            new SetQuota()
                .withEnterpriseProjectId("0")
                .withInstanceQuota(20)
                .withVcpusQuota(20)
                .withRamQuota(40)
        );
        body.withQuotaList(listbodyQuotaList);
        request.withBody(body);
        try {
```

```
        SetGaussMySqlQuotasResponse response = client.setGaussMySqlQuotas(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

设置资源配额。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = SetGaussMySqlQuotasRequest()
        listQuotaListbody = [
            SetQuota(
                enterprise_project_id="0",
                instance_quota=20,
                vcpus_quota=20,
                ram_quota=40
            )
        ]
        request.body = SetQuotasRequestBody(
            quota_list=listQuotaListbody
        )
        response = client.set_gauss_my_sql_quotas(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置资源配额。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SetGaussMySQLQuotasRequest{}
    instanceQuotaQuotaList := int32(20)
    vcpusQuotaQuotaList := int32(20)
    ramQuotaQuotaList := int32(40)
    var listQuotaListbody = []model.SetQuota{
        {
            EnterpriseProjectId: "0",
            InstanceQuota: &instanceQuotaQuotaList,
            VcpusQuota: &vcpusQuotaQuotaList,
            RamQuota: &ramQuotaQuotaList,
        },
    }
    request.Body = &model.SetQuotasRequestBody{
        QuotaList: listQuotaListbody,
    }
    response, err := client.SetGaussMySQLQuotas(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.6.4 修改租户基于企业项目的资源配额

功能介绍

修改指定企业项目的资源配额。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/quotas

表 4-501 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-502 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-503 请求 Body 参数

参数	是否必选	参数类型	描述
quota_list	是	Array of setQuota objects	资源列表对象。

表 4-504 setQuota

参数	是否必选	参数类型	描述
enterprise_project_id	是	String	企业项目ID。
instance_quota	否	Integer	实例个数配额。取值范围0~100000。(如果已经存在实例，应该大于已经存在的实例个数)
vcpus_quota	否	Integer	CPU核数配额。取值范围0~2147483646。(如果已经存在实例，应该大于已经占用的cpu个数)
ram_quota	否	Integer	内存使用配额，单位为GB。取值范围0~2147483646。(如果已经存在实例，应该大于已经占用的内存数)

响应参数

状态码：200

表 4-505 响应 Body 参数

参数	参数类型	描述
quota_list	Array of setQuota objects	资源列表对象。

表 4-506 setQuota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。
instance_quota	Integer	实例个数配额。取值范围0~100000。 (如果已经存在实例, 应该大于已经存在的实例个数)
vcpus_quota	Integer	CPU核数配额。取值范围0~2147483646。 (如果已经存在实例, 应该大于已经占用的cpu个数)
ram_quota	Integer	内存使用配额, 单位为GB。取值范围0~2147483646。 (如果已经存在实例, 应该大于已经占用的内存数)

状态码：400

表 4-507 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-508 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改指定企业项目的资源配额。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/quotas
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

响应示例

状态码: 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpus_quota": 20,
    "ram_quota": 40
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改指定企业项目的资源配额。

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

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

public class UpdateGaussMySQLQuotasSolution {

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

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

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

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateGaussMySQLQuotasRequest request = new UpdateGaussMySQLQuotasRequest();
SetQuotasRequestBody body = new SetQuotasRequestBody();
List<SetQuota> listbodyQuotaList = new ArrayList<>();
listbodyQuotaList.add(
    new SetQuota()
        .withEnterpriseProjectId("0")
        .withInstanceQuota(20)
        .withVcpusQuota(20)
        .withRamQuota(40)
);
body.withQuotaList(listbodyQuotaList);
request.withBody(body);
try {
    UpdateGaussMySQLQuotasResponse response = client.updateGaussMySQLQuotas(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改指定企业项目的资源配额。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = UpdateGaussMySQLQuotasRequest()
        listQuotaListbody = [
            SetQuota(
```

```
        enterprise_project_id="0",
        instance_quota=20,
        vcpus_quota=20,
        ram_quota=40
    )
]
request.body = SetQuotasRequestBody(
    quota_list=listQuotaListbody
)
response = client.update_gauss_my_sql_quotas(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改指定企业项目的资源配额。

```
package main

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

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySqlQuotasRequest{}
    instanceQuotaQuotaList:= int32(20)
    vcpusQuotaQuotaList:= int32(20)
    ramQuotaQuotaList:= int32(40)
    var listQuotaListbody = []model.SetQuota{
        {
            EnterpriseProjectId: "0",
            InstanceQuota: &instanceQuotaQuotaList,
            VcpusQuota: &vcpusQuotaQuotaList,
            RamQuota: &ramQuotaQuotaList,
        },
    }
    request.Body = &model.SetQuotasRequestBody{
        QuotaList: listQuotaListbody,
    }
    response, err := client.UpdateGaussMySqlQuotas(request)
```

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.6.5 查询企业项目

功能介绍

查询企业项目。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/enterprise-projects

表 4-509 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-510 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-511 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-512 响应 Body 参数

参数	参数类型	描述
enterprise_projects	Array of EnterpriseProjectItem objects	企业项目信息列表。
total_count	Integer	总数。

表 4-513 EnterpriseProjectItem

参数	参数类型	描述
id	String	企业项目ID。
name	String	企业项目名称。
description	String	描述。
status	String	状态。 - 1: 正常。 - 0: 异常。
created	String	创建时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
updated	String	更新时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。

状态码: 400

表 4-514 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-515 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询企业项目。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/enterprise-projects
```

响应示例

状态码: 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"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

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

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListEnterpriseProjectsSolution {

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

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

```
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    ListEnterpriseProjectsRequest request = new ListEnterpriseProjectsRequest();
    try {
        ListEnterpriseProjectsResponse response = client.listEnterpriseProjects(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

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

    credentials = BasicCredentials(ak, sk, projectId)

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

    try:
        request = ListEnterpriseProjectsRequest()
        response = client.list_enterprise_projects(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

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

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

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

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

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7 数据库代理

4.7.1 开启数据库代理

功能介绍

开启数据库代理，只支持ELB模式。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy

表 4-516 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-517 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-518 请求 Body 参数

参数	是否必选	参数类型	描述
flavor_ref	是	String	数据库代理规格码，获取方法请参见 查询数据库代理规格信息 返回的spec_code字段。
node_num	是	Integer	数据库代理节点数，取值整数 2-16。
proxy_name	否	String	数据库代理名称。用于表示实例的名称，同一租户下，同类型的实例名可重名。 取值范围：最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。
proxy_mode	否	String	数据库代理类型。默认类型为readwrite。
route_mode	否	Integer	数据库代理路由模式，默认为0，权重负载模式。 取值范围： <ul style="list-style-type: none">0：表示权重负载模式。1：表示负载均衡模式（数据库主节点不接受读请求）。2：表示负载均衡模式（数据库主节点接受读请求）。
nodes_read_weight	否	Array of NodesWeight objects	数据库节点的读权重设置。 在proxy_mode为readonly时，只能为只读节点选择权重。
subnet_id	否	String	数据库VPC下的子网ID。
new_node_auto_add_status	否	String	是否开启新增节点自动加入该Proxy。如果需要设置是否开启新增节点自动加入该Proxy，请联系客服人员添加白名单，加入白名单后，方可输入该字段。加入白名单后，默认值为OFF。 取值范围： <ul style="list-style-type: none">ON：开启。OFF：关闭。

参数	是否必选	参数类型	描述
new_node_weight	否	Integer	新增节点的读权重，在 new_node_auto_add_status 参数为 ON 时为必选字段： <ul style="list-style-type: none">如果路由模式为 0，新增节点自动加入为 ON，取值为 0~1000。如果路由模式不为 0 或新增节点自动加入为 OFF，则可不输入读权重。

表 4-519 NodesWeight

参数	是否必选	参数类型	描述
id	否	String	数据库节点 ID。
weight	否	Integer	权重： <ul style="list-style-type: none">如果路由模式为 0，取值为 0~1000。如果路由模式为 1，数据库主节点取值为 0，只读节点取值为 0 或 1。如果路由模式为 2，数据库主节点取值为 1，只读节点取值为 0 或 1。

响应参数

状态码：201

表 4-520 响应 Body 参数

参数	参数类型	描述
job_id	String	任务 ID。

状态码：400

表 4-521 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-522 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

开启数据库代理，规格2U8GB，代理模式只读模式。

```
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"
}
```

响应示例

状态码：201

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

SDK 代码示例

SDK代码示例如下。

Java

开启数据库代理，规格2U8GB，代理模式只读模式。

```
package com.huaweicloud.sdk.test;
```



```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateGaussMySQLProxySolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        CreateGaussMySQLProxyRequest request = new CreateGaussMySQLProxyRequest();
        request.withInstanceId("{instance_id}");
        OpenMySQLProxyRequestBody body = new OpenMySQLProxyRequestBody();
        List<NodesWeight> listbodyNodesReadWeight = new ArrayList<>();
        listbodyNodesReadWeight.add(
            new NodesWeight()
                .withId("45021bf73a244312a3f2af95092feecno07")
                .withWeight(50)
        );
        listbodyNodesReadWeight.add(
            new NodesWeight()
                .withId("d78a65690cea4af5ad14585e110ff89bno07")
                .withWeight(400)
        );
        body.withSubnetId("6991d82d-9166-4aff-a1fa-d2a8748b7084");
        body.withNodesReadWeight(listbodyNodesReadWeight);
        body.withRouteMode(0);
        body.withProxyMode(OpenMySQLProxyRequestBody.ProxyModeEnum.fromValue("readonly"));
        body.withProxyName("gaussdb-proxy");
        body.withNodeNum(2);
        body.withFlavorRef("gaussdb.proxy.large.x86.2");
        request.withBody(body);
        try {
            CreateGaussMySQLProxyResponse response = client.createGaussMySQLProxy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}
```

Python

开启数据库代理，规格2U8GB，代理模式只读模式。

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = CreateGaussMySQLProxyRequest()  
        request.instance_id = "{instance_id}"  
        listNodesReadWeightbody = [  
            NodesWeight(  
                id="45021bf73a244312a3f2af95092feecno07",  
                weight=50  
            ),  
            NodesWeight(  
                id="d78a65690cea4af5ad14585e110ff89bno07",  
                weight=400  
            )  
        ]  
        request.body = OpenMySQLProxyRequestBody(  
            subnet_id="6991d82d-9166-4aff-a1fa-d2a8748b7084",  
            nodes_read_weight=listNodesReadWeightbody,  
            route_mode=0,  
            proxy_mode="readonly",  
            proxy_name="gaussdb-proxy",  
            node_num=2,  
            flavor_ref="gaussdb.proxy.large.x86.2"  
        )  
        response = client.create_gauss_my_sql_proxy(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

开启数据库代理，规格2U8GB，代理模式只读模式。

```
package main
```

```
import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySQLProxyRequest{}
    request.InstanceId = "{instance_id}"
    idNodesReadWeight:= "45021bf73a244312a3f2af95092feecno07"
    weightNodesReadWeight:= int32(50)
    idNodesReadWeight1:= "d78a65690cea4af5ad14585e110ff89bno07"
    weightNodesReadWeight1:= int32(400)
    var listNodesReadWeightbody = []model.NodesWeight{
        {
            Id: &idNodesReadWeight,
            Weight: &weightNodesReadWeight,
        },
        {
            Id: &idNodesReadWeight1,
            Weight: &weightNodesReadWeight1,
        },
    }
    subnetIdOpenMySQLProxyRequestBody:= "6991d82d-9166-4aff-a1fa-d2a8748b7084"
    routeModeOpenMySQLProxyRequestBody:= int32(0)
    proxyModeOpenMySQLProxyRequestBody:=
model.GetOpenMySQLProxyRequestBodyProxyModeEnum().READONLY
    proxyNameOpenMySQLProxyRequestBody:= "gaussdb-proxy"
    request.Body = &model.OpenMySQLProxyRequestBody{
        SubnetId: &subnetIdOpenMySQLProxyRequestBody,
        NodesReadWeight: &listNodesReadWeightbody,
        RouteMode: &routeModeOpenMySQLProxyRequestBody,
        ProxyMode: &proxyModeOpenMySQLProxyRequestBody,
        ProxyName: &proxyNameOpenMySQLProxyRequestBody,
        NodeNum: int32(2),
        FlavorRef: "gaussdb.proxy.large.x86.2",
    }
    response, err := client.CreateGaussMySQLProxy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.2 关闭数据库代理

功能介绍

关闭数据库代理。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/proxy

表 4-523 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-524 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-525 请求 Body 参数

参数	是否必选	参数类型	描述
proxy_ids	否	Array of strings	数据库代理ID列表。 如果实例只开启了一个代理，可不传该字段；如果实例开启了多个代理，则必须指定要关闭的代理。

响应参数

状态码：200

表 4-526 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-527 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-528 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

关闭数据库代理。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxy  
  
{  
  "proxy_ids" : [ "151c14381ac14ecfb9703a745b992677po01" ]  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

关闭数据库代理。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;
```

```
public class DeleteGaussMySQLProxySolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteGaussMySQLProxyRequest request = new DeleteGaussMySQLProxyRequest();
        request.withInstanceId("{instance_id}");
        CloseMysqlProxyRequestBody body = new CloseMysqlProxyRequestBody();
        List<String> listbodyProxyIds = new ArrayList<>();
        listbodyProxyIds.add("151c14381ac14ecfb9703a745b992677po01");
        body.withProxyIds(listbodyProxyIds);
        request.withBody(body);
        try {
            DeleteGaussMySQLProxyResponse response = client.deleteGaussMySQLProxy(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

关闭数据库代理。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = DeleteGaussMySQLProxyRequest()
    request.instance_id = "{instance_id}"
    listProxyIdsbody = [
        "151c14381ac14ecfb9703a745b992677po01"
    ]
    request.body = CloseMysqlProxyRequestBody(
        proxy_ids=listProxyIdsbody
    )
    response = client.delete_gauss_my_sql_proxy(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

关闭数据库代理。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteGaussMySQLProxyRequest{}
    request.InstanceId = "{instance_id}"
    var listProxyIdsbody = []string{
        "151c14381ac14ecfb9703a745b992677po01",
    }
    request.Body = &model.CloseMysqlProxyRequestBody{
        ProxyIds: &listProxyIdsbody,
    }
    response, err := client.DeleteGaussMySQLProxy(request)
    if err == nil {
```



```
    fmt.Printf("%+v\n", response)
  } else {
    fmt.Println(err)
  }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.3 查询数据库代理信息列表

功能介绍

查询数据库代理信息列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxies

表 4-529 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。
instance_id	是	String	参数解释: 实例ID，此参数是实例的唯一标识。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，后缀为in07，长度为36个字符。 默认取值: 不涉及。

表 4-530 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	参数解释: 索引位置，偏移量。从第一条数据偏移offset条数据后开始查询。 约束限制: 必须为整数，不能为负数。 取值范围: ≥0 默认取值: 0

参数	是否必选	参数类型	描述
limit	否	Integer	<p>参数解释： 查询记录数。</p> <p>约束限制： 必须为整数，不能为负数。</p> <p>取值范围： 1-100</p> <p>默认取值： 100</p>

请求参数

表 4-531 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释： 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制： 不涉及。</p> <p>取值范围： 不涉及。</p> <p>默认值： 不涉及。</p>
X-Language	否	String	<p>参数解释： 请求语言类型。</p> <p>约束限制： 不涉及。</p> <p>取值范围：</p> <ul style="list-style-type: none"> en-us zh-cn <p>默认值： en-us。</p>

响应参数

状态码: 200

表 4-532 响应 Body 参数

参数	参数类型	描述
proxy_list	Array of MysqlShowProxyResponseV3 objects	参数解释: 数据库代理信息列表。

表 4-533 MysqlShowProxyResponseV3

参数	参数类型	描述
proxy	MysqlProxyV3 object	参数解释: 数据库代理信息。
master_node	MysqlProxyNodeV3 object	参数解释: 主节点信息。
readonly_nodes	Array of MysqlProxyNodeV3 objects	参数解释: 只读节点信息。

表 4-534 MysqlProxyV3

参数	参数类型	描述
pool_id	String	参数解释: 数据库代理ID。 取值范围: 只能由英文字母、数字组成, 后缀为 po01, 长度为36个字符。

参数	参数类型	描述
status	String	参数解释: 数据库代理开启状态。 取值范围: <ul style="list-style-type: none">• ACTIVE: 表示数据库代理正常。• FAILED: 表示数据库代理创建失败。• DELETED: 表示数据库代理已删除。• ABNORMAL: 表示数据库代理异常。• ENABLING PROXY: 表示数据库代理正在开启。• DISABLING PROXY: 表示数据库代理正在关闭。• ADDING PROXY NODE: 表示数据库代理正在扩容。• DELETING READ REPLICAS FROM PROXY: 表示数据库代理正在移除只读节点。• ADDING READ REPLICAS TO PROXY: 表示数据库代理正在添加只读节点。• CHANGING WEIGHTS: 表示数据库代理正在修改只读节点权重。
address	String	参数解释: 数据库代理读写分离地址。 取值范围: 不涉及。
port	Integer	参数解释: 数据库代理端口信息。 取值范围: 不涉及。
pool_status	String	参数解释: 数据库代理状态。 取值范围: <ul style="list-style-type: none">• ACTIVE: 表示数据库代理正常。• ABNORMAL: 表示数据库代理异常。• FAILED: 表示数据库代理创建失败。• DELETED: 表示数据库代理已删除。

参数	参数类型	描述
delay_threshold_in_seconds	Integer	参数解释: 延时阈值, 单位: 秒。 取值范围: 不涉及。
elb_vip	String	参数解释: Elb模式的虚拟IP信息。 取值范围: 不涉及。
eip	String	参数解释: 弹性公网IP地址信息。 取值范围: 不涉及。
vcpus	String	参数解释: 数据库代理规格的CPU数量。 取值范围: 不涉及。
ram	String	参数解释: 数据库代理规格的内存数量。 取值范围: 不涉及。
node_num	Integer	参数解释: 数据库代理节点个数。 取值范围: 不涉及。
mode	String	参数解释: 数据库代理主备模式。 取值范围: Cluster。
nodes	Array of MysqlProxyNodes objects	参数解释: 数据库代理节点信息。
flavor_ref	String	参数解释: 数据库代理规格信息。 取值范围: 不涉及。

参数	参数类型	描述
name	String	参数解释: 数据库代理名称。 取值范围: 不涉及。
transaction_split	String	参数解释: 数据库代理事务拆分开关状态。 取值范围: <ul style="list-style-type: none"> • true: 开启。 • false: 关闭。
connection_pool_type	String	参数解释: 连接池类型。 取值范围: <ul style="list-style-type: none"> • CLOSED: 关闭连接池。 • SESSION: 开启会话级连接池。
switch_connection_pool_type_enabled	Boolean	参数解释: 数据库代理版本是否支持会话级连接池。 取值范围: <ul style="list-style-type: none"> • true: 支持。 • false: 不支持。
route_mode	Integer	参数解释: 数据库代理路由模式。 取值范围: <ul style="list-style-type: none"> • 0: 表示权重负载模式。 • 1: 表示负载均衡模式 (数据库主节点不接受读请求)。 • 2: 表示负载均衡模式 (数据库主节点接受读请求)。
balance_route_mode_enabled	Boolean	参数解释: 数据库代理版本是否支持负载均衡模式。 取值范围: <ul style="list-style-type: none"> • true 支持。 • false 不支持。

参数	参数类型	描述
consistence_mode	String	<p>参数解释: 一致性模式。默认值为空, 此时以会话一致性参数session_consistence的值为准。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • session: 会话一致性 (当 session_consistence为true时, 只能取该值)。 • global: 全局一致性 (当 session_consistence为false时, 可取该值)。 • eventual: 最终一致性 (当 session_consistence为false时, 可取该值)。
subnet_id	String	<p>参数解释: 数据库代理所属的子网ID。</p> <p>取值范围: 不涉及。</p>
ssl_option	String	<p>参数解释: SSL数据加密开关设置。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • true: 开启SSL数据加密。 • false: 关闭SSL数据加密。
new_node_auto_add_status	String	<p>参数解释: 新增节点是否自动加入该数据库代理。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • ON: 自动加入。 • OFF: 不自动加入。
new_node_weight	Integer	<p>参数解释: 新增节点的读权重。</p> <p>取值范围: 1-1000。</p>

表 4-535 MysqlProxyNodes

参数	参数类型	描述
id	String	数据库代理节点ID。

参数	参数类型	描述
status	String	<p>参数解释: 数据库代理节点状态。</p> <p>取值范围:</p> <ul style="list-style-type: none"> ACTIVE: 表示节点正常。 ABNORMAL: 表示节点异常。 FAILED: 表示节点失败。 DELETED: 表示节点已删除。
name	String	<p>参数解释: 数据库代理节点名称。</p> <p>取值范围: 不涉及。</p>
role	String	<p>参数解释: 数据库代理节点角色。</p> <p>取值范围:</p> <ul style="list-style-type: none"> master: 主节点。 slave: 只读节点。
az_code	String	<p>参数解释: 可用区。</p> <p>取值范围: 不涉及。</p>
frozen_flag	Integer	<p>参数解释: 数据库代理节点是否被冻结。</p> <p>取值范围:</p> <ul style="list-style-type: none"> 0: 未冻结。 1: 冻结。 2: 冻结删除。

表 4-536 MysqlProxyNodeV3

参数	参数类型	描述
id	String	<p>参数解释: 数据库代理节点ID。</p> <p>取值范围: 只能由英文字母、数字组成, 后缀为no07, 长度为36个字符。</p>

参数	参数类型	描述
instance_id	String	参数解释: 实例ID, 此参数是实例的唯一标识。 取值范围: 只能由英文字母、数字组成, 后缀为in07, 长度为36个字符。
status	String	参数解释: 节点状态。 取值范围: <ul style="list-style-type: none"> ACTIVE: 表示节点正常。 ABNORMAL: 表示节点异常。 FAILED: 表示节点失败。 DELETED: 表示节点已删除。
name	String	参数解释: 节点名称。 取值范围: 不涉及。
weight	Integer	参数解释: 节点读写分离读权重。 取值范围: 1-1000。
availability_zone	Array of MysqlProxyAvailable objects	参数解释: 可用区信息。

表 4-537 MysqlProxyAvailable

参数	参数类型	描述
code	String	参数解释: 可用区编码。 取值范围: 不涉及。
description	String	参数解释: 可用区描述。 取值范围: 不涉及。

状态码: 400

表 4-538 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-539 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例的数据库代理信息列表。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
517ea793ab91438cbfcd9c4b1c958b1ein07/proxies?offset=0&limit=10
```

响应示例

状态码：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,  
      "route_mode" : 1,  
      "balance_route_mode_enabled" : true,  
    }  
  ]  
}
```

```
"transaction_split" : "OFF",
"consistence_mode" : "session",
"subnet_id" : "6991d82d-9166-4aff-a1fa-d2a8748b7084",
"new_node_auto_add_status" : "ON",
"new_node_weight" : 100
},
"master_node" : {
  "id" : "c01a5645eb2c4fb6a9373542f5366e50no07",
  "instance_id" : "517ea793ab91438cbfcd9c4b1c958b1ein07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node01",
  "weight" : 0,
  "availability_zone" : [ {
    "code" : "az1",
    "description" : "可用区1"
  } ]
},
"readonly_nodes" : {
  "id" : "d23535333138462880bfa1838dfcd2no07",
  "instance_id" : "517ea793ab91438cbfcd9c4b1c958b1ein07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node02",
  "weight" : 100,
  "availability_zone" : [ {
    "code" : "az1",
    "description" : "可用区1"
  } ]
}
}
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySQLProxyListSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
ShowGaussMySQLProxyListRequest request = new ShowGaussMySQLProxyListRequest();
request.withInstanceId("{instance_id}");
try {
    ShowGaussMySQLProxyListResponse response = client.showGaussMySQLProxyList(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = ShowGaussMySQLProxyListRequest()
        request.instance_id = "{instance_id}"
        response = client.show_gauss_my_sql_proxy_list(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ShowGaussMySQLProxyListRequest{  
        InstanceId: "{instance_id}"  
    }  
    response, err := client.ShowGaussMySQLProxyList(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.4 查询数据库代理规格信息

功能介绍

查询数据库代理规格信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/flavors

表 4-540 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-541 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-542 响应 Body 参数

参数	参数类型	描述
proxy_flavor_groups	Array of MysqlProxyFlavorGroups objects	规格组信息。

表 4-543 MysqlProxyFlavorGroups

参数	参数类型	描述
group_type	String	规格组类型，如x86、arm。
proxy_flavors	Array of MysqlProxyComputeFlavor objects	规格信息。

表 4-544 MysqlProxyComputeFlavor

参数	参数类型	描述
vcpus	String	CPU大小。例如：1表示1U。
ram	String	内存大小，单位为GB。
db_type	String	数据库类型。
id	String	数据库代理规格ID。
spec_code	String	数据库代理规格码。
az_status	Object	其中key是可用区编号，value是规格所在AZ的状态。

状态码：400

表 4-545 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-546 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例的数据库代理规格信息。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxy/flavors
```

响应示例

状态码：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"  
      }  
    }  
  ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowGaussMySQLProxyFlavorsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
ShowGaussMySQLProxyFlavorsRequest request = new ShowGaussMySQLProxyFlavorsRequest();
request.withInstanceId("{instance_id}");
try {
    ShowGaussMySQLProxyFlavorsResponse response = client.showGaussMySQLProxyFlavors(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = ShowGaussMySQLProxyFlavorsRequest()
        request.instance_id = "{instance_id}"
        response = client.show_gauss_my_sql_proxy_flavors(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ShowGaussMySQLProxyFlavorsRequest{}  
    request.InstanceId = "{instance_id}"  
    response, err := client.ShowGaussMySQLProxyFlavors(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.5 扩容数据库代理节点的数量

功能介绍

扩容数据库代理节点的数量。

DeC专属云账号暂不支持数据库代理。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/enlarge

表 4-547 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-548 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-549 请求 Body 参数

参数	是否必选	参数类型	描述
node_num	是	Integer	数据库代理节点扩容操作需要扩容的节点数。 扩容的节点数的取值范围：1~14之间的整数。 限制条件：该实例的数据库代理节点的总数量小于等于16。

参数	是否必选	参数类型	描述
proxy_id	否	String	数据库代理ID。 如果实例只开启了一个代理，可不传该参数；如果实例开启了多个代理，则必须指定一个数据库代理，扩容新的代理节点。

响应参数

状态码：201

表 4-550 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-551 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-552 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

扩容数据库代理节点。

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
61a4ea66210545909d74a05c27a7179ein07/proxy/enlarge  
  
{  
  "node_num": 2,  
}
```

```
"proxy_id": "151c14381ac14ecfb9703a745b992677po01"  
}
```

响应示例

状态码：201

Success.

```
{  
  "job_id": "04efe8e2-9255-44ae-a98b-d87cae411890"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

扩容数据库代理节点。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ExpandGaussMySQLProxySolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ExpandGaussMySQLProxyRequest request = new ExpandGaussMySQLProxyRequest();  
        request.withInstanceId("{instance_id}");  
        EnlargeProxyRequest body = new EnlargeProxyRequest();  
        body.withProxyId("151c14381ac14ecfb9703a745b992677po01");  
        body.withNodeNum(2);  
        request.withBody(body);  
        try {  
            ExpandGaussMySQLProxyResponse response = client.expandGaussMySQLProxy(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {
```

```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

扩容数据库代理节点。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ExpandGaussMySqlProxyRequest()
        request.instance_id = "{instance_id}"
        request.body = EnlargeProxyRequest(
            proxy_id="151c14381ac14ecfb9703a745b992677po01",
            node_num=2
        )
        response = client.expand_gauss_my_sql_proxy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

扩容数据库代理节点。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ExpandGaussMySQLProxyRequest{
        request.InstanceId = "{instance_id}"
        proxyIdEnlargeProxyRequest := "151c14381ac14ecfb9703a745b992677po01"
        request.Body = &model.EnlargeProxyRequest{
            ProxyId: &proxyIdEnlargeProxyRequest,
            NodeNum: int32(2),
        }
    }
    response, err := client.ExpandGaussMySQLProxy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.6 减少数据库代理节点的数量

功能介绍

扩容数据库代理节点的数量。

DeC专属云账号暂不支持数据库代理。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/reduce

表 4-553 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-554 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-555 请求 Body 参数

参数	是否必选	参数类型	描述
node_num	是	Integer	数据库代理节点缩容操作需要减少的节点数。 缩容的节点数的取值范围： 1~14之间的整数。 限制条件：该实例的数据库代理节点的总数量小于等于16，大于等于2。

响应参数

状态码：201

表 4-556 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-557 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-558 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

缩容数据库代理节点。

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/reduce
```

```
{  
  "node_num" : 1  
}
```

响应示例

状态码：201

Success.

```
{  
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

缩容数据库代理节点。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShrinkGaussMySQLProxySolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShrinkGaussMySQLProxyRequest request = new ShrinkGaussMySQLProxyRequest();  
        request.withInstanceId("{instance_id}");  
        request.withProxyId("{proxy_id}");  
        ShrinkGaussMySQLProxyRequestBody body = new ShrinkGaussMySQLProxyRequestBody();  
        body.withNodeNum(1);  
        request.withBody(body);  
        try {  
            ShrinkGaussMySQLProxyResponse response = client.shrinkGaussMySQLProxy(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

缩容数据库代理节点。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShrinkGaussMySQLProxyRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = ShrinkGaussMySQLProxyRequestBody(
            node_num=1
        )
        response = client.shrink_gauss_my_sql_proxy(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

缩容数据库代理节点。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShrinkGaussMySQLProxyRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.ShrinkGaussMySQLProxyRequestBody{
        NodeNum: int32(1),
    }
    response, err := client.ShrinkGaussMySQLProxy(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.7 数据库代理规格变更

功能介绍

数据库代理规格变更。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/flavor

表 4-559 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-560 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-561 请求 Body 参数

参数	是否必选	参数类型	描述
flavor_ref	是	String	需要变更的新规格ID。

响应参数

状态码：200

表 4-562 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-563 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-564 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

变更数据库代理的规格为4U8GB。

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/flavor  
{  
  "flavor_ref" : "gaussdb.proxy.xlarge.arm.2"  
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

SDK 代码示例

SDK代码示例如下。

Java

变更数据库代理的规格为4U8GB。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ChangeGaussMySQLProxySpecificationSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        ChangeGaussMySQLProxySpecificationRequest request = new
        ChangeGaussMySQLProxySpecificationRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        TaurusProxyScaleRequest body = new TaurusProxyScaleRequest();
        body.withFlavorRef("gaussdb.proxy.xlarge.arm.2");
        request.withBody(body);
        try {
            ChangeGaussMySQLProxySpecificationResponse response =
            client.changeGaussMySQLProxySpecification(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
```



```
e.printStackTrace();
System.out.println(e.getStatusCode());
System.out.println(e.getRequestId());
System.out.println(e.getErrorCode());
System.out.println(e.getErrorMsg());
    }
}
}
```

Python

变更数据库代理的规格为4U8GB。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ChangeGaussMySQLProxySpecificationRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = TaurusProxyScaleRequest(
            flavor_ref="gaussdb.proxy.xlarge.arm.2"
        )
        response = client.change_gauss_my_sql_proxy_specification(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

变更数据库代理的规格为4U8GB。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ChangeGaussMySQLProxySpecificationRequest{}
request.InstanceId = "{instance_id}"
request.ProxyId = "{proxy_id}"
request.Body = &model.TaurusProxyScaleRequest{
    FlavorRef: "gaussdb.proxy.xlarge.arm.2",
}
response, err := client.ChangeGaussMySQLProxySpecification(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.8 设置读写分离权重

功能介绍

设置读写分离权重。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/weight

表 4-565 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-566 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-567 请求 Body 参数

参数	是否必选	参数类型	描述
master_weight	否	Integer	主节点权重（两个参数必选其一）。

参数	是否必选	参数类型	描述
readonly_nodes	否	Array of ModifyProxyWeightReadOnlyNode objects	只读节点权重配置信息（两个参数必选其一）。

表 4-568 ModifyProxyWeightReadOnlyNode

参数	是否必选	参数类型	描述
id	否	String	只读节点ID。
weight	否	Integer	只读节点权重。

响应参数

状态码：200

表 4-569 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-570 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-571 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置实例的主节点权重是100。

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/weight
{
  "master_weight" : 100
}
```

响应示例

状态码: 200

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87c11411890"
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置实例的主节点权重是100。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SetGaussMySQLProxyWeightSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SetGaussMySQLProxyWeightRequest request = new SetGaussMySQLProxyWeightRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        TaurusModifyProxyWeightRequest body = new TaurusModifyProxyWeightRequest();
```

```
body.withMasterWeight(100);
request.withBody(body);
try {
    SetGaussMySQLProxyWeightResponse response = client.setGaussMySQLProxyWeight(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

设置实例的主节点权重是100。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SetGaussMySQLProxyWeightRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = TaurusModifyProxyWeightRequest(
            master_weight=100
        )
        response = client.set_gauss_my_sql_proxy_weight(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置实例的主节点权重是100。

```
package main
```

```
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.SetGaussMySQLProxyWeightRequest{  
        request.InstanceId = "{instance_id}"  
        request.ProxyId = "{proxy_id}"  
        masterWeightTaurusModifyProxyWeightRequest:= int32(100)  
        request.Body = &model.TaurusModifyProxyWeightRequest{  
            MasterWeight: &masterWeightTaurusModifyProxyWeightRequest,  
        }  
    }  
    response, err := client.SetGaussMySQLProxyWeight(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.9 设置读写分离路由模式

功能介绍

设置读写分离路由模式。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/route-mode

表 4-572 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-573 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-574 请求 Body 参数

参数	是否必选	参数类型	描述
route_mode	是	Integer	数据库代理路由模式。 取值范围： <ul style="list-style-type: none">0: 表示权重负载模式。1: 表示负载均衡模式（数据库主节点不接受读请求）。2: 表示负载均衡模式（数据库主节点接受读请求）。
master_weight	否	Integer	主节点权重： <ul style="list-style-type: none">如果路由模式为0，取值为0~1000。如果路由模式为1，取值为0。如果路由模式为2，取值为1。
readonly_nodes	否	Array of ModifyProxyRouteWeightReadOnlyNode objects	只读节点权重配置信息。
new_node_auto_add_status	否	String	是否开启新增节点自动加入该Proxy。如果需要设置是否开启新增节点自动加入该Proxy，请联系客服人员添加白名单，加入白名单后，方可输入该字段。 取值范围： <ul style="list-style-type: none">ON: 开启。OFF: 关闭。
new_node_weight	否	Integer	新增节点的读权重： <ul style="list-style-type: none">如果路由模式为0，新增节点自动加入为ON，取值为0~1000。如果路由模式不为0或新增节点自动加入为OFF，则可不输入读权重。

表 4-575 ModifyProxyRouteWeightReadOnlyNode

参数	是否必选	参数类型	描述
id	是	String	只读节点ID。

参数	是否必选	参数类型	描述
weight	是	Integer	只读节点权重： <ul style="list-style-type: none">如果路由模式为0，取值为0~1000；如果路由模式为1或2，取值为0或1。

响应参数

状态码：200

表 4-576 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-577 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-578 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 修改路由模式为权重负载模式。

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-
mode
{
  "route_mode": 0,
```

```
"master_weight" : 100,
"readonly_nodes" : {
  "id" : "d23535333138462880bfa1838fdced2no07",
  "weight" : 200
}
}
```

- 修改路由模式为负载均衡模式（数据库主节点不接受读请求）。

PUT <https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-mode>

```
{
  "route_mode" : 1,
  "master_weight" : 0,
  "readonly_nodes" : {
    "id" : "d23535333138462880bfa1838fdced2no07",
    "weight" : 1
  }
}
```

- 修改路由模式为负载均衡模式（数据库主节点接受读请求）。

PUT <https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/route-mode>

```
{
  "route_mode" : 2,
  "master_weight" : 1,
  "readonly_nodes" : {
    "id" : "d23535333138462880bfa1838fdced2no07",
    "weight" : 0
  }
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87c11411890"
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 修改路由模式为权重负载模式。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;
```

```
public class ModifyGaussMySQLProxyRouteModeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before  
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
        // environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ModifyGaussMySQLProxyRouteModeRequest request = new  
ModifyGaussMySQLProxyRouteModeRequest();  
        request.withInstanceId("{instance_id}");  
        request.withProxyId("{proxy_id}");  
        ModifyGaussMySQLProxyRouteModeRequestBody body = new  
ModifyGaussMySQLProxyRouteModeRequestBody();  
        body.withMasterWeight(100);  
        body.withRouteMode(0);  
        request.withBody(body);  
        try {  
            ModifyGaussMySQLProxyRouteModeResponse response =  
client.modifyGaussMySQLProxyRouteMode(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

- 修改路由模式为负载均衡模式（数据库主节点不接受读请求）。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class ModifyGaussMySQLProxyRouteModeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.
```

```
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

ModifyGaussMySQLProxyRouteModeRequest request = new
ModifyGaussMySQLProxyRouteModeRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
ModifyGaussMySQLProxyRouteModeRequestBody body = new
ModifyGaussMySQLProxyRouteModeRequestBody();
body.withMasterWeight(0);
body.withRouteMode(1);
request.withBody(body);
try {
    ModifyGaussMySQLProxyRouteModeResponse response =
client.modifyGaussMySQLProxyRouteMode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 修改路由模式为负载均衡模式（数据库主节点接受读请求）。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ModifyGaussMySQLProxyRouteModeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";
```

```
ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

ModifyGaussMySQLProxyRouteModeRequest request = new
ModifyGaussMySQLProxyRouteModeRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
ModifyGaussMySQLProxyRouteModeRequestBody body = new
ModifyGaussMySQLProxyRouteModeRequestBody();
body.withMasterWeight(1);
body.withRouteMode(2);
request.withBody(body);
try {
    ModifyGaussMySQLProxyRouteModeResponse response =
client.modifyGaussMySQLProxyRouteMode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 修改路由模式为权重负载模式。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ModifyGaussMySQLProxyRouteModeRequest()
        request.instance_id = "{instance_id}"
```

```
request.proxy_id = "{proxy_id}"
request.body = ModifyGaussMySQLProxyRouteModeRequestBody(
    master_weight=100,
    route_mode=0
)
response = client.modify_gauss_my_sql_proxy_route_mode(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 修改路由模式为负载均衡模式（数据库主节点不接受读请求）。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ModifyGaussMySQLProxyRouteModeRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = ModifyGaussMySQLProxyRouteModeRequestBody(
            master_weight=0,
            route_mode=1
        )
        response = client.modify_gauss_my_sql_proxy_route_mode(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 修改路由模式为负载均衡模式（数据库主节点接受读请求）。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ModifyGaussMySQLProxyRouteModeRequest()
    request.instance_id = "{instance_id}"
    request.proxy_id = "{proxy_id}"
    request.body = ModifyGaussMySQLProxyRouteModeRequestBody(
        master_weight=1,
        route_mode=2
    )
    response = client.modify_gauss_my_sql_proxy_route_mode(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- 修改路由模式为权重负载模式。

```
package main

import (
    "fmt"
    "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ModifyGaussMySQLProxyRouteModeRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    masterWeightModifyGaussMySQLProxyRouteModeRequestBody := int32(100)
```



```
request.Body = &model.ModifyGaussMySqlProxyRouteModeRequestBody{
    MasterWeight: &masterWeightModifyGaussMySqlProxyRouteModeRequestBody,
    RouteMode: int32(0),
}
response, err := client.ModifyGaussMySqlProxyRouteMode(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 修改路由模式为负载均衡模式（数据库主节点不接受读请求）。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ModifyGaussMySqlProxyRouteModeRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    masterWeightModifyGaussMySqlProxyRouteModeRequestBody := int32(0)
    request.Body = &model.ModifyGaussMySqlProxyRouteModeRequestBody{
        MasterWeight: &masterWeightModifyGaussMySqlProxyRouteModeRequestBody,
        RouteMode: int32(1),
    }
    response, err := client.ModifyGaussMySqlProxyRouteMode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 修改路由模式为负载均衡模式（数据库主节点接受读请求）。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
  )

  func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
      WithAk(ak).
      WithSk(sk).
      WithProjectId(projectId).
      Build()

    client := gaussdb.NewGaussDBClient(
      gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build()

    request := &model.ModifyGaussMySQLProxyRouteModeRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    masterWeightModifyGaussMySQLProxyRouteModeRequestBody := int32(1)
    request.Body = &model.ModifyGaussMySQLProxyRouteModeRequestBody{
      MasterWeight: &masterWeightModifyGaussMySQLProxyRouteModeRequestBody,
      RouteMode: int32(2),
    }
    response, err := client.ModifyGaussMySQLProxyRouteMode(request)
    if err == nil {
      fmt.Printf("%+v\n", response)
    } else {
      fmt.Println(err)
    }
  }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.10 设置数据库代理事务拆分

功能介绍

设置数据库代理事务拆分。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/transaction-split

表 4-579 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-580 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-581 请求 Body 参数

参数	是否必选	参数类型	描述
transaction_split	是	String	开启/关闭事务拆分。 取值范围： <ul style="list-style-type: none">• ON: 开启。• OFF: 关闭。
proxy_id_list	是	Array of strings	实例的数据库代理列表。

响应参数

状态码：200

表 4-582 响应 Body 参数

参数	参数类型	描述
job_id	String	工作流ID。

状态码：400

表 4-583 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-584 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

关闭数据库代理的事务拆分。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/6b030d160ac24eda9a5320fb38dc2d0ain07/proxy/transaction-split
```

```
{
  "transaction_split": "OFF",
  "proxy_id_list": [ "2a2060f2486e4a47934182d91a3b53d2po01" ]
}
```

响应示例

状态码: 200

success

```
{
  "job_id": "11921bf5-f286-45ee-ab35-12a3d4084c57"
}
```

SDK 代码示例

SDK代码示例如下。

Java

关闭数据库代理的事务拆分。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateTransactionSplitStatusSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateTransactionSplitStatusRequest request = new UpdateTransactionSplitStatusRequest();
        request.withInstanceId("{instance_id}");
        ProxyTransactionSplitRequest body = new ProxyTransactionSplitRequest();
        List<String> listbodyProxyIdList = new ArrayList<>();
        listbodyProxyIdList.add("2a2060f2486e4a47934182d91a3b53d2po01");
        body.withProxyIdList(listbodyProxyIdList);
        body.withTransactionSplit("OFF");
    }
}
```

```
request.withBody(body);
try {
    UpdateTransactionSplitStatusResponse response = client.updateTransactionSplitStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

关闭数据库代理的事务拆分。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateTransactionSplitStatusRequest()
        request.instance_id = "{instance_id}"
        listProxyIdListbody = [
            "2a2060f2486e4a47934182d91a3b53d2po01"
        ]
        request.body = ProxyTransactionSplitRequest(
            proxy_id_list=listProxyIdListbody,
            transaction_split="OFF"
        )
        response = client.update_transaction_split_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

关闭数据库代理的事务拆分。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateTransactionSplitStatusRequest{}
    request.InstanceId = "{instance_id}"
    var listProxyIdListbody = []string{
        "2a2060f2486e4a47934182d91a3b53d2po01",
    }
    request.Body = &model.ProxyTransactionSplitRequest{
        ProxyIdList: listProxyIdListbody,
        TransactionSplit: "OFF",
    }
    response, err := client.UpdateTransactionSplitStatus(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	success
400	Client error
500	Server error

错误码

请参见[错误码](#)。

4.7.11 开启或关闭新增节点自动加入该 Proxy

功能介绍

开启或关闭新增节点自动加入该Proxy。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/new-node-auto-add

表 4-585 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-586 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-587 请求 Body 参数

参数	是否必选	参数类型	描述
switch_status	是	String	是否开启新增节点自动加入该Proxy。 取值范围： <ul style="list-style-type: none">ON: 开启。OFF: 关闭。
weight	否	Integer	新增节点的读权重： <ul style="list-style-type: none">新增节点自动加入为ON, 取值为0~1000。新增节点自动加入为OFF, 则可不输入读权重。

响应参数

状态码：200

表 4-588 响应 Body 参数

参数	参数类型	描述
result	String	开启或关闭新增节点自动加入该Proxy的操作结果。

状态码：400

表 4-589 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-590 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

开启新增节点自动加入该Proxy。

```
POST https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/new-node-
auto-add
{
  "switch_status": "ON",
  "weight": 100
}
```

响应示例

状态码：200

Success.

```
{
  "result": "success"
}
```

SDK 代码示例

SDK代码示例如下。

Java

开启新增节点自动加入该Proxy。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateNewNodeAutoAddSwitchSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateNewNodeAutoAddSwitchRequest request = new UpdateNewNodeAutoAddSwitchRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
UpdateNewNodeAutoAddSwitchRequestBody body = new
UpdateNewNodeAutoAddSwitchRequestBody();
body.withWeight(100);
body.withSwitchStatus("ON");
request.withBody(body);
try {
    UpdateNewNodeAutoAddSwitchResponse response =
client.updateNewNodeAutoAddSwitch(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

开启新增节点自动加入该Proxy。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = UpdateNewNodeAutoAddSwitchRequest()
    request.instance_id = "{instance_id}"
    request.proxy_id = "{proxy_id}"
    request.body = UpdateNewNodeAutoAddSwitchRequestBody(
        weight=100,
        switch_status="ON"
    )
    response = client.update_new_node_auto_add_switch(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

开启新增节点自动加入该Proxy。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateNewNodeAutoAddSwitchRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    weightUpdateNewNodeAutoAddSwitchRequestBody := int32(100)
    request.Body = &model.UpdateNewNodeAutoAddSwitchRequestBody{
        Weight: &weightUpdateNewNodeAutoAddSwitchRequestBody,
        SwitchStatus: "ON",
    }
    response, err := client.UpdateNewNodeAutoAddSwitch(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.12 修改代理会话一致性

功能介绍

修改代理会话一致性。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/session-consistence

表 4-591 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-592 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-593 请求 Body 参数

参数	是否必选	参数类型	描述
session_consistence	是	String	会话一致性。 取值范围： <ul style="list-style-type: none">true: 时表示会话一致性开启。false: 时表示会话一致性关闭。
consistence_mode	否	String	一致性模式。默认值为空，此时以会话一致性参数session_consistence的值为准。 取值范围： <ul style="list-style-type: none">session: 会话一致性（当session_consistence为true时，只能取该值）。global: 全局一致性（当session_consistence为false时，可取该值）。eventual: 最终一致性（当session_consistence为false时，可取该值）。

响应参数

状态码：200

表 4-594 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-595 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-596 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

开启数据库代理的会话一致性。

```
PUT https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/  
d512257ecca04d96a0f3a9021018a385in07/proxy/7bf4a8bbb4f4fb58233a242ee13603bpo01/session-  
consistence  
  
{  
  "session_consistence": "true",  
  "consistence_mode": "session"  
}
```

响应示例

状态码：200

Success

```
{  
  "job_id": "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

开启数据库代理的会话一致性。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateProxySessionConsistenceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateProxySessionConsistenceRequest request = new UpdateProxySessionConsistenceRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        ModifyProxyConsistRequest body = new ModifyProxyConsistRequest();
        body.withConsistenceMode("session");
        body.withSessionConsistence("true");
        request.withBody(body);
        try {
            UpdateProxySessionConsistenceResponse response = client.updateProxySessionConsistence(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

开启数据库代理的会话一致性。

```
# coding: utf-8
import os
```



```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateProxySessionConsistenceRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = ModifyProxyConsistRequest(
            consistence_mode="session",
            session_consistence="true"
        )
        response = client.update_proxy_session_consistence(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

开启数据库代理的会话一致性。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
```

```
gaussdb.GaussDBClientBuilder().
    WithRegion(region.ValueOf("<YOUR REGION>")).
    WithCredential(auth).
    Build()

request := &model.UpdateProxySessionConsistenceRequest{}
request.InstanceId = "{instance_id}"
request.ProxyId = "{proxy_id}"
consistenceModeModifyProxyConsistRequest := "session"
request.Body = &model.ModifyProxyConsistRequest{
    ConsistenceMode: &consistenceModeModifyProxyConsistRequest,
    SessionConsistence: "true",
}
response, err := client.UpdateProxySessionConsistence(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.13 更改数据库代理连接池类型

功能介绍

更改数据库代理连接池类型。

接口约束

该接口目前公测阶段，如需使用，请提交工单联系客服人员申请权限。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/connection-pool-type

表 4-597 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID, 严格匹配UUID规则。
proxy_id	是	String	数据库代理ID, 严格匹配UUID规则。

请求参数

表 4-598 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-599 请求 Body 参数

参数	是否必选	参数类型	描述
connection_pool_type	是	String	连接池类型。 取值范围： <ul style="list-style-type: none">CLOSED: 关闭连接池。SESSION: 开启会话级连接池。

响应参数

状态码：200

表 4-600 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-601 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-602 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启数据库代理的会话连接池。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/proxy/5881e1ca66af4aefbc64dc2874e55b3fpo01/connection-pool-type
```

```
{  
  "connection_pool_type": "SESSION"  
}
```

- 关闭数据库代理的连接池。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/af315b8e6aaa41799bd9a31f2de15abcin07/proxy/5881e1ca66af4aefbc64dc2874e55b3fpo01/connection-pool-type
```

```
{  
  "connection_pool_type": "CLOSED"  
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "a4217ac4-12cd-4fb3-acfc-db4a4a1896ea"
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启数据库代理的会话连接池。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateProxyConnectionPoolTypeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateProxyConnectionPoolTypeRequest request = new
        UpdateProxyConnectionPoolTypeRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        ProxyUpdateProxyConnectionPoolTypeRequest body = new
        ProxyUpdateProxyConnectionPoolTypeRequest();
        body.withConnectionPoolType("SESSION");
        request.withBody(body);
        try {
            UpdateProxyConnectionPoolTypeResponse response =
            client.updateProxyConnectionPoolType(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
        }
    }
}
```

```
        System.out.println(e.getErrorCode());  
        System.out.println(e.getErrorMsg());  
    }  
}
```

- 关闭数据库代理的连接池。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateProxyConnectionPoolTypeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before  
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
        // environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateProxyConnectionPoolTypeRequest request = new  
UpdateProxyConnectionPoolTypeRequest();  
        request.withInstanceId("{instance_id}");  
        request.withProxyId("{proxy_id}");  
        ProxyUpdateProxyConnectionPoolTypeRequest body = new  
ProxyUpdateProxyConnectionPoolTypeRequest();  
        body.withConnectionPoolType("CLOSED");  
        request.withBody(body);  
        try {  
            UpdateProxyConnectionPoolTypeResponse response =  
client.updateProxyConnectionPoolType(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

- 开启数据库代理的会话连接池。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateProxyConnectionPoolTypeRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = ProxyUpdateProxyConnectionPoolTypeRequest(
            connection_pool_type="SESSION"
        )
        response = client.update_proxy_connection_pool_type(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 关闭数据库代理的连接池。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```

```
.build()

try:
    request = UpdateProxyConnectionPoolTypeRequest()
    request.instance_id = "{instance_id}"
    request.proxy_id = "{proxy_id}"
    request.body = ProxyUpdateProxyConnectionPoolTypeRequest(
        connection_pool_type="CLOSED"
    )
    response = client.update_proxy_connection_pool_type(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- 开启数据库代理的会话连接池。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateProxyConnectionPoolTypeRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.ProxyUpdateProxyConnectionPoolTypeRequest{
        ConnectionPoolType: "SESSION",
    }
    response, err := client.UpdateProxyConnectionPoolType(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 关闭数据库代理的连接池。


```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateProxyConnectionPoolTypeRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.ProxyUpdateProxyConnectionPoolTypeRequest{
        ConnectionPoolType: "CLOSED",
    }
    response, err := client.UpdateProxyConnectionPoolType(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.14 修改读写分离端口号

功能介绍

修改读写分离端口号。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/port

表 4-603 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-604 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-605 请求 Body 参数

参数	是否必选	参数类型	描述
port	是	Integer	修改后的读写分离端口。 TaurusDB Proxy端口号范围： 大于等于1025，小于等于 65534，不包含端口1033、 5342-5345、12017、20000、 20201、20202、33062、 33071。

响应参数

状态码：200

表 4-606 响应 Body 参数

参数	参数类型	描述
job_id	String	修改proxy端口号的任务ID。

状态码：400

表 4-607 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-608 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改读写分离端口号。

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxy/fbece38953e24a2b891488ed2dfd81abpo01/port
```

```
{  
  "port" : 3308  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id" : "ef5dbd00-ad3c-41f7-902b-51b4466ae9b9"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改读写分离端口号。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class UpdateProxyPortSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateProxyPortRequest request = new UpdateProxyPortRequest();  
        request.withInstanceId("{instance_id}");  
        request.withProxyId("{proxy_id}");  
        UpdateProxyPortRequestBody body = new UpdateProxyPortRequestBody();  
        body.withPort(3308);  
        request.withBody(body);  
        try {  
            UpdateProxyPortResponse response = client.updateProxyPort(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

修改读写分离端口号。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateProxyPortRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = UpdateProxyPortRequestBody(
            port=3308
        )
        response = client.update_proxy_port(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

修改读写分离端口号。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateProxyPortRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.UpdateProxyPortRequestBody{
        Port: int32(3308),
    }
    response, err := client.UpdateProxyPort(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.15 升级数据库代理实例内核版本

功能介绍

升级数据库代理实例内核版本。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/upgrade-version

表 4-609 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-610 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-611 请求 Body 参数

参数	是否必选	参数类型	描述
source_version	是	String	升级前源内核版本号
target_version	是	String	目标升级内核版本号

响应参数

状态码：200

表 4-612 响应 Body 参数

参数	参数类型	描述
update_result	Array of ProxyUpgradeVersionDetail objects	数据库代理升级信息列表。

表 4-613 ProxyUpgradeVersionDetail

参数	参数类型	描述
instance_id	String	实例id.
workflow_id	String	工作流Id。
state	String	返回状态。
error_message	String	错误消息。

状态码：400

表 4-614 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-615 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

升级数据库代理实例内核版本。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/517ea793ab91438cbfcd9c4b1c958b1ein07/proxy/0f46fc46396e4fb19a0cb52f578e9511po01/upgrade-version
{
  "source_version": "2.23.12.000",
  "target_version": "2.24.03.000"
}
```

响应示例

状态码：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"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

升级数据库代理实例内核版本。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpgradeProxyVersionSolution {
    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpgradeProxyVersionRequest request = new UpgradeProxyVersionRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
ProxyUpgradeProxyVersionRequest body = new ProxyUpgradeProxyVersionRequest();
body.withTargetVersion("2.24.03.000");
body.withSourceVersion("2.23.12.000");
request.withBody(body);
try {
    UpgradeProxyVersionResponse response = client.upgradeProxyVersion(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

升级数据库代理实例内核版本。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```

```
.build()

try:
    request = UpgradeProxyVersionRequest()
    request.instance_id = "{instance_id}"
    request.proxy_id = "{proxy_id}"
    request.body = ProxyUpgradeProxyVersionRequest(
        target_version="2.24.03.000",
        source_version="2.23.12.000"
    )
    response = client.upgrade_proxy_version(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

升级数据库代理实例内核版本。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpgradeProxyVersionRequest{
        request.InstanceId = "{instance_id}"
        request.ProxyId = "{proxy_id}"
        request.Body = &model.ProxyUpgradeProxyVersionRequest{
            TargetVersion: "2.24.03.000",
            SourceVersion: "2.23.12.000",
        }
    }
    response, err := client.UpgradeProxyVersion(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.16 修改代理实例名称

功能介绍

修改代理实例名称

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/rename

表 4-616 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一region下的project ID。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-617 请求 Header 参数

参数	是否必选	参数类型	描述
X-Language	否	String	语言。
Content-Type	是	String	内容类型。 取值: application/json。
X-Auth-Token	是	String	用户token。

表 4-618 请求 Body 参数

参数	是否必选	参数类型	描述
alias	是	String	修改代理实例的新名称

响应参数

状态码: 200

表 4-619 响应 Body 参数

参数	参数类型	描述
result	String	修改成功或者失败。

状态码: 400

表 4-620 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-621 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

修改代理实例名称

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/rename
{
  "alias": "newName"
}
```

响应示例

状态码: 200

Success.

```
{
  "result": "success"
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改代理实例名称

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateProxyNameSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);
```

```
GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateProxyNameRequest request = new UpdateProxyNameRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
ProxyUpdateProxyNameRequest body = new ProxyUpdateProxyNameRequest();
body.withAlias("newName");
request.withBody(body);
try {
    UpdateProxyNameResponse response = client.updateProxyName(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改代理实例名称

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateProxyNameRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = ProxyUpdateProxyNameRequest(
            alias="newName"
        )
        response = client.update_proxy_name(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

Go

修改代理实例名称

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateProxyNameRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.ProxyUpdateProxyNameRequest{
        Alias: "newName",
    }
    response, err := client.UpdateProxyName(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.17 查询代理实例访问控制

功能介绍

查询代理实例访问控制

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/ipgroup

表 4-622 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一region下的project ID。
instance_id	是	String	实例ID, 严格匹配UUID规则。
proxy_id	是	String	数据库代理ID, 严格匹配UUID规则。

请求参数

表 4-623 请求 Header 参数

参数	是否必选	参数类型	描述
X-Language	否	String	语言。
X-Auth-Token	是	String	用户token。

响应参数

状态码：200

表 4-624 响应 Body 参数

参数	参数类型	描述
enable_ip_group	Boolean	允许访问控制或者不允许 true false。
type	String	白名单或者黑名单 'white' 'black'
ip_group	ProxyIpGroupDetail object	白名单或黑名单详细信息

表 4-625 ProxyIpGroupDetail

参数	参数类型	描述
id	String	ipGroup的id
name	String	ipGroup的名称
ip_list	Array of IpGroupItem objects	ipGroup内部的ip列表

表 4-626 IpGroupItem

参数	参数类型	描述
ip	String	ip或者网段
description	String	ip的描述

状态码：400

表 4-627 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-628 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询代理实例访问控制

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/ipgroup
```

响应示例

状态码: 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"
    }
  ]
}
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowProxyIpGroupSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowProxyIpGroupRequest request = new ShowProxyIpGroupRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
try {
    ShowProxyIpGroupResponse response = client.showProxyIpGroup(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowProxyIpGroupRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        response = client.show_proxy_ipgroup(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
```

```
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowProxyIpgroupRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    response, err := client.ShowProxyIpgroup(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.18 查询代理实例小版本

功能介绍

查询代理实例小版本

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/{engine_name}/
proxy-version

表 4-629 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一region下的project ID。
instance_id	是	String	实例ID，严格匹配UUID规则。
engine_name	是	String	表示TaurusDB服务的读写分离代理，固定填写taurusproxy。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-630 请求 Header 参数

参数	是否必选	参数类型	描述
X-Language	否	String	语言。
X-Auth-Token	是	String	用户token。

响应参数

状态码：200

表 4-631 响应 Body 参数

参数	参数类型	描述
current_version	String	当前代理版本
latest_version	String	最新代理版本
can_upgrade	Boolean	是否能升级

状态码：400

表 4-632 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-633 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询代理实例小版本

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
4785fc80386846f3ad2bf4e0cd53a4cein07/proxy/286a4a1a45e3400c907b51b0721377f9po01/taurusproxy/  
proxy-version
```

响应示例

状态码：200

Success.

```
{  
  "current_version": "2.23.12.000",  
  "latest_version": "2.24.03.000",  
  "can_upgrade": true  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowProxyVersionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowProxyVersionRequest request = new ShowProxyVersionRequest();
        request.withInstanceId("{instance_id}");
        request.withEngineName("{engine_name}");
        request.withProxyId("{proxy_id}");
        try {
            ShowProxyVersionResponse response = client.showProxyVersion(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```



```
variables and decrypted during use to ensure security.
# In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowProxyVersionRequest()
    request.instance_id = "{instance_id}"
    request.engine_name = "{engine_name}"
    request.proxy_id = "{proxy_id}"
    response = client.show_proxy_version(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3/model"
    region "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowProxyVersionRequest{
        request.InstanceId = "{instance_id}"
        request.EngineName = "{engine_name}"
        request.ProxyId = "{proxy_id}"
    }
    response, err := client.ShowProxyVersion(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
```

```
    fmt.Println(err)
  }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.19 修改代理实例参数

功能介绍

修改数据库代理参数。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/configurations

表 4-634 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
proxy_id	是	String	数据库代理ID，严格匹配UUID规则。

请求参数

表 4-635 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-636 请求 Body 参数

参数	是否必选	参数类型	描述
configurations	是	Array of UpdateProxyConfigurationItem objects	修改的配置信息。

表 4-637 UpdateProxyConfigurationItem

参数	是否必选	参数类型	描述
name	是	String	参数名。
value	是	String	参数值。
elem_type	是	String	父标签类型。

响应参数

状态码：200

表 4-638 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-639 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-640 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改数据库代理参数。

```
PUT https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/configurations
{
  "configurations" : [ {
    "name" : "multiStatementType",
    "value" : "Loose",
    "elem_type" : "system"
  } ]
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "994cb0aa-9547-4271-bfc2-08f968276744"
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改数据库代理参数。

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateProxyNewConfigurationsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateProxyNewConfigurationsRequest request = new UpdateProxyNewConfigurationsRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        UpdateProxyNewConfigRequestBody body = new UpdateProxyNewConfigRequestBody();
        List<UpdateProxyConfigurationItem> listbodyConfigurations = new ArrayList<>();
        listbodyConfigurations.add(
            new UpdateProxyConfigurationItem()
                .withName("multiStatementType")
                .withValue("Loose")
                .withElemType("system")
        );
        body.withConfigurations(listbodyConfigurations);
        request.withBody(body);
        try {
            UpdateProxyNewConfigurationsResponse response = client.updateProxyNewConfigurations(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

修改数据库代理参数。

```
# coding: utf-8
```

```
import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateProxyNewConfigurationsRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        listConfigurationsbody = [
            UpdateProxyConfigurationItem(
                name="multiStatementType",
                value="Loose",
                elem_type="system"
            )
        ]
        request.body = UpdateProxyNewConfigRequestBody(
            configurations=listConfigurationsbody
        )
        response = client.update_proxy_new_configurations(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

修改数据库代理参数。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"
```

```
auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateProxyNewConfigurationsRequest{}
request.InstanceId = "{instance_id}"
request.ProxyId = "{proxy_id}"
var listConfigurationsbody = []model.UpdateProxyConfigurationItem{
    {
        Name: "multiStatementType",
        Value: "Loose",
        ElemType: "system",
    },
}
request.Body = &model.UpdateProxyNewConfigRequestBody{
    Configurations: listConfigurationsbody,
}
response, err := client.UpdateProxyNewConfigurations(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.20 查询数据库代理内核参数

功能介绍

查询数据库代理内核参数。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/configurations

表 4-641 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。
proxy_id	是	String	数据库代理ID。

表 4-642 Query 参数

参数	是否必选	参数类型	描述
limit	否	Integer	查询记录数。默认为10，不能为负数，最小值为1，最大值为100。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
name	否	String	参数名称，为空则全量查询。

请求参数

表 4-643 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	语言。

响应参数

状态码: 200

表 4-644 响应 Body 参数

参数	参数类型	描述
total_count	String	数据总数
configurations	Array of ProxyConfiguration objects	内核可配置参数列表

表 4-645 ProxyConfiguration

参数	参数类型	描述
name	String	参数名称
data_type	String	参数数据类型
elem_type	String	参数父标签类型
value_range	String	取值范围
value	String	参数默认值
description	String	参数描述

状态码: 400

表 4-646 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-647 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询数据库代理内核参数。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/configurations
```

响应示例

状态码: 200

Success.

```
{
  "total_count": 1,
  "configurations": [ {
    "name": "slowLogQueryTime",
    "data_type": "integer",
    "elem_type": "system",
    "value_range": "200-50000",
    "value": 500,
    "description": "proxy慢日志阈值，默认值为500，单位ms。"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowProxyConfigurationsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";
```

```
ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowProxyConfigurationsRequest request = new ShowProxyConfigurationsRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
try {
    ShowProxyConfigurationsResponse response = client.showProxyConfigurations(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowProxyConfigurationsRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        response = client.show_proxy_configurations(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowProxyConfigurationsRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    response, err := client.ShowProxyConfigurations(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.21 开启或关闭访问控制

功能介绍

开启或关闭访问控制。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/access-control-switch

表 4-648 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID, 严格匹配UUID规则。
proxy_id	是	String	数据库代理ID, 严格匹配UUID规则。

请求参数

表 4-649 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-650 请求 Body 参数

参数	是否必选	参数类型	描述
open_access_control	是	Boolean	是否开启访问控制。取值： - true：开启。 - false：关闭。

响应参数

状态码：200

表 4-651 响应 Body 参数

参数	参数类型	描述
open_access_control	Boolean	是否已开启访问控制。取值： - true：开启。 - false：关闭。

状态码：400

表 4-652 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-653 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启访问控制。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-control-switch
```

```
{  
  "open_access_control": true  
}
```

- 关闭访问控制。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-control-switch
```

```
{
  "open_access_control" : false
}
```

响应示例

状态码: 200

Success.

- 开启访问控制。

```
{
  "open_access_control" : true
}
```

- 关闭访问控制。

```
{
  "open_access_control" : false
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启访问控制。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SwitchAccessControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
SwitchAccessControlRequest request = new SwitchAccessControlRequest();
request.withInstanceId("{instance_id}");
request.withProxyId("{proxy_id}");
SwitchAccessControlRequestBody body = new SwitchAccessControlRequestBody();
body.withOpenAccessControl(true);
request.withBody(body);
try {
    SwitchAccessControlResponse response = client.switchAccessControl(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- 关闭访问控制。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SwitchAccessControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SwitchAccessControlRequest request = new SwitchAccessControlRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        SwitchAccessControlRequestBody body = new SwitchAccessControlRequestBody();
        body.withOpenAccessControl(false);
        request.withBody(body);
        try {
            SwitchAccessControlResponse response = client.switchAccessControl(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```



```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

- 开启访问控制。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SwitchAccessControlRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = SwitchAccessControlRequestBody(
            open_access_control=True
        )
        response = client.switch_access_control(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 关闭访问控制。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
```

security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.

In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = SwitchAccessControlRequest()
    request.instance_id = "{instance_id}"
    request.proxy_id = "{proxy_id}"
    request.body = SwitchAccessControlRequestBody(
        open_access_control=False
    )
    response = client.switch_access_control(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

- 开启访问控制。

```
package main

import (
    "fmt"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchAccessControlRequest{
        request.InstanceId = "{instance_id}"
```

```
request.ProxyId = "{proxy_id}"
request.Body = &model.SwitchAccessControlRequestBody{
    OpenAccessControl: true,
}
response, err := client.SwitchAccessControl(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 关闭访问控制。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchAccessControlRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.SwitchAccessControlRequestBody{
        OpenAccessControl: false,
    }
    response, err := client.SwitchAccessControl(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.22 设置访问控制规则

功能介绍

设置访问控制规则。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/access-control

表 4-654 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID, 严格匹配UUID规则。
proxy_id	是	String	数据库代理ID, 严格匹配UUID规则。

请求参数

表 4-655 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-656 请求 Body 参数

参数	是否必选	参数类型	描述
type	是	String	访问控制方式。取值： - white: 表示白名单。 - black: 表示黑名单。
ip_list	是	Array of AccessControlRule objects	控制访问的IP地址数组，最多可添加300个IP地址或网段。

表 4-657 AccessControlRule

参数	是否必选	参数类型	描述
ip	是	String	IP地址或网段。
description	否	String	备注。备注长度范围是0到50个字符，不能包含<>。

响应参数

状态码：200

表 4-658 响应 Body 参数

参数	参数类型	描述
open_access_control	Boolean	是否已开启访问控制。取值： - true：开启。 - false：关闭。

状态码：400

表 4-659 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-660 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置访问控制规则。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/e87088f0b6a345e79db19d57c41fde15po01/access-control
{
  "type": "black",
  "ip_list": [ {
    "ip": "192.107.0.1",
    "description": "black01"
  } ]
}
```

响应示例

状态码：200

Success.

```
{
  "open_access_control": false
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置访问控制规则。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateAccessControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateAccessControlRequest request = new CreateAccessControlRequest();
        request.withInstanceId("{instance_id}");
        request.withProxyId("{proxy_id}");
        CreateAccessControlRequestBody body = new CreateAccessControlRequestBody();
        List<AccessControlRule> listbodyIpList = new ArrayList<>();
        listbodyIpList.add(
            new AccessControlRule()
                .withIp("192.107.0.1")
                .withDescription("black01")
        );
        body.withIpList(listbodyIpList);
        body.withType("black");
        request.withBody(body);
        try {
            CreateAccessControlResponse response = client.createAccessControl(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
        }
    }
}
```

```
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

设置访问控制规则。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateAccessControlRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        listIpListbody = [
            AccessControlRule(
                ip="192.107.0.1",
                description="black01"
            )
        ]
        request.body = CreateAccessControlRequestBody(
            ip_list=listIpListbody,
            type="black"
        )
        response = client.create_access_control(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

设置访问控制规则。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```



```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build()  
    )  
  
    request := &model.CreateAccessControlRequest{}  
    request.InstanceId = "{instance_id}"  
    request.ProxyId = "{proxy_id}"  
    descriptionIpList := "black01"  
    var listIpListbody = []model.AccessControlRule{  
        {  
            Ip: "192.107.0.1",  
            Description: &descriptionIpList,  
        },  
    }  
    request.Body = &model.CreateAccessControlRequestBody{  
        IpList: listIpListbody,  
        Type: "black",  
    }  
    response, err := client.CreateAccessControl(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.23 开关数据库代理 SSL

功能介绍

为数据库代理设置SSL数据加密。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/ssl

表 4-661 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	租户在某一project下的实例 ID。
proxy_id	是	String	数据库代理ID。

请求参数

表 4-662 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-663 请求 Body 参数

参数	是否必选	参数类型	描述
ssl_option	是	Boolean	SSL数据加密开关设置。 取值范围： <ul style="list-style-type: none">• true: 开启SSL数据加密。• false: 关闭SSL数据加密。

响应参数

状态码：200

表 4-664 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码：400

表 4-665 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-666 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

开关SSL数据加密示例。

```
PUT https://{endpoint}/v3/056538411200d4cd2f79c003c7606412/instances/  
096c0fc43e804757b59946b80dc27f8bin07/proxyId/2ec617ba62da4eafb921b69438beed3cpo01/ssl  
{
```

```
"ssl_option" : true  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id" : "e0fbbfc8-1ac4-4721-b9e9-7dd685c5bdd7"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

开关SSL数据加密示例。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class SwitchGaussMySQLProxySslSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        SwitchGaussMySQLProxySslRequest request = new SwitchGaussMySQLProxySslRequest();  
        request.withInstanceId("{instance_id}");  
        request.withProxyId("{proxy_id}");  
        SwitchProxySSLRequest body = new SwitchProxySSLRequest();  
        body.withSslOption(true);  
        request.withBody(body);  
        try {  
            SwitchGaussMySQLProxySslResponse response = client.switchGaussMySQLProxySsl(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {
```

```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

开关SSL数据加密示例。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SwitchGaussMySQLProxySslRequest()
        request.instance_id = "{instance_id}"
        request.proxy_id = "{proxy_id}"
        request.body = SwitchProxySSLRequest(
            ssl_option=True
        )
        response = client.switch_gauss_my_sql_proxy_ssl(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

开关SSL数据加密示例。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SwitchGaussMySQLProxySslRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    request.Body = &model.SwitchProxySslRequest{
        SslOption: true,
    }
    response, err := client.SwitchGaussMySQLProxySsl(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.7.24 重启数据库代理

功能介绍

重启数据库代理。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/proxy/{proxy_id}/restart

表 4-667 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。
proxy_id	是	String	数据库代理ID。

请求参数

表 4-668 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	语言。

响应参数

状态码: 200

表 4-669 响应 Body 参数

参数	参数类型	描述
job_id	String	工作流ID。

状态码：400

表 4-670 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-671 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重启数据库代理。

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/proxy/151c14381ac14ecfb9703a745b992677po01/restart
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "dff1d289-4d03-4942-854f-463ea07c000d"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class RestartProxyInstanceSolution {
```



```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    RestartProxyInstanceRequest request = new RestartProxyInstanceRequest();
    request.withInstanceId("{instance_id}");
    request.withProxyId("{proxy_id}");
    try {
        RestartProxyInstanceResponse response = client.restartProxyInstance(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RestartProxyInstanceRequest()
```

```
request.instance_id = "{instance_id}"
request.proxy_id = "{proxy_id}"
response = client.restart_proxy_instance(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestartProxyInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.ProxyId = "{proxy_id}"
    response, err := client.RestartProxyInstance(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8 日志管理

4.8.1 开启或者关闭全量 SQL

功能介绍

开启或者关闭全量SQL。关闭全量SQL后，可能导致DAS和DBSS服务全量SQL功能不可用，请谨慎关闭。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instance/{instance_id}/audit-log/switch

表 4-672 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-673 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-674 请求 Body 参数

参数	是否必选	参数类型	描述
switch_status	是	String	全量SQL开关状态。 取值： <ul style="list-style-type: none">ON：表示开启。OFF：表示关闭。

响应参数

状态码：200

表 4-675 响应 Body 参数

参数	参数类型	描述
result	String	开启/关闭全量SQL操作结果。

状态码：400

表 4-676 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-677 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启全量SQL。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/  
61a4ea66210545909d74a05c27a7179ein07/audit-log/switch
```

```
{  
  "switch_status": "ON"  
}
```

- 关闭全量SQL。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/  
61a4ea66210545909d74a05c27a7179ein07/audit-log/switch
```

```
{  
  "switch_status": "OFF"  
}
```

响应示例

状态码：200

Success.

```
{  
  "result": "success"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启全量SQL。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

```
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateAuditLogSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateAuditLogRequest request = new UpdateAuditLogRequest();
        request.withInstanceId("{instance_id}");
        OperateAuditLogRequestV3Body body = new OperateAuditLogRequestV3Body();
        body.withSwitchStatus("ON");
        request.withBody(body);
        try {
            UpdateAuditLogResponse response = client.updateAuditLog(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- 关闭全量SQL。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateAuditLogSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
```

```
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateAuditLogRequest request = new UpdateAuditLogRequest();
request.withInstanceId("{instance_id}");
OperateAuditLogRequestV3Body body = new OperateAuditLogRequestV3Body();
body.withSwitchStatus("OFF");
request.withBody(body);
try {
    UpdateAuditLogResponse response = client.updateAuditLog(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 开启全量SQL。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAuditLogRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateAuditLogRequestV3Body(
```

```
        switch_status="ON"
    )
    response = client.update_audit_log(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 关闭全量SQL。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateAuditLogRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateAuditLogRequestV3Body(
            switch_status="OFF"
        )
        response = client.update_audit_log(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 开启全量SQL。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
```



```
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateAuditLogRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.OperateAuditLogRequestV3Body{
    SwitchStatus: "ON",
}
response, err := client.UpdateAuditLog(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 关闭全量SQL。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateAuditLogRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.OperateAuditLogRequestV3Body{
        SwitchStatus: "OFF",
    }
}
```

```
}  
response, err := client.UpdateAuditLog(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.2 查询全量 SQL 开关状态

功能介绍

查询全量SQL开关状态。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instance/{instance_id}/audit-log/switch-status

表 4-678 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-679 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-680 响应 Body 参数

参数	参数类型	描述
switch_status	String	全量SQL开关状态。 取值： <ul style="list-style-type: none">ON：表示开启。OFF：表示关闭。

状态码：400

表 4-681 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-682 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询全量SQL开关状态。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instance/61a4ea66210545909d74a05c27a7179ein07/audit-log/switch-status
```

响应示例

状态码：200

Success.

```
{
  "switch_status": "ON"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowAuditLogSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
ShowAuditLogRequest request = new ShowAuditLogRequest();
request.withInstanceId("{instance_id}");
try {
    ShowAuditLogResponse response = client.showAuditLog(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = ShowAuditLogRequest()
        request.instance_id = "{instance_id}"
        response = client.show_audit_log(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ShowAuditLogRequest{}  
    request.InstanceId = "{instance_id}"  
    response, err := client.ShowAuditLog(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.3 获取慢日志详情列表

功能介绍

获取指定实例的慢日志详情列表。

调用方法

请参见[如何调用API](#)。

URI

POST /v3.1/{project_id}/instances/{instance_id}/slow-logs

表 4-683 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。
instance_id	是	String	参数解释: 实例ID，此参数是实例的唯一标识。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，后缀为in07，长度为36个字符。 默认取值: 不涉及。

请求参数

表 4-684 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释: 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• en-us• zh-cn 默认值: en-us。

表 4-685 请求 Body 参数

参数	是否必选	参数类型	描述
node_id	是	String	参数解释: 节点ID。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,前面为UUID,后缀为no07,长度为36个字符。 默认取值: 不涉及。

参数	是否必选	参数类型	描述
start_time	是	String	参数解释: 开始时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 约束限制: 不涉及。 取值范围: 早于当前时间。 默认取值: 不涉及。
end_time	是	String	参数解释: 结束时间, 格式为“yyyy-mm-ddThh:mm:ssZ”。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 约束限制: 不涉及。 取值范围: 晚于开始时间, 早于当前时间。 默认取值: 不涉及。
limit	是	Integer	参数解释: 查询记录数。 约束限制: 不涉及。 取值范围: 1-5000。 默认取值: 不涉及。

参数	是否必选	参数类型	描述
line_num	否	String	<p>参数解释: 日志单行序列号, 第一次查询时不需要此参数, 后续分页查询时需要使用, 可从上次查询的返回信息中获取。</p> <p>约束限制: 不涉及</p> <p>取值范围: 只能取数字, 长度为13个字符。</p> <p>默认取值: 不涉及。</p>
operate_type	否	String	<p>参数解释: SQL语句类型。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 取空值或ALL, 表示查询所有语句类型。 也可指定如下日志类型:</p> <ul style="list-style-type: none"> ● INSERT ● UPDATE ● SELECT ● DELETE ● ALTER ● DROP ● CREATE <p>默认值: 不涉及。</p>
database	否	String	<p>参数解释: 所属数据库。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>

响应参数

状态码：200

表 4-686 响应 Body 参数

参数	参数类型	描述
slow_log_list	Array of LtsLogSlowDetail objects	参数解释： 慢日志列表。

表 4-687 LtsLogSlowDetail

参数	参数类型	描述
node_id	String	参数解释： 节点ID。 取值范围： 只能由英文字母、数字组成，前面为UUID，后缀为no07，长度为36个字符。
count	String	参数解释： 执行次数。 取值范围： 不涉及。
time	String	参数解释： 执行时间。 取值范围： 不涉及。
lock_time	String	参数解释： 等待锁时间。 取值范围： 不涉及。
rows_sent	String	参数解释： 结果行数量。 取值范围： 不涉及。
rows_examined	String	参数解释： 扫描的行数量。 取值范围： 不涉及。

参数	参数类型	描述
database	String	参数解释: 所属数据库。 取值范围: gaussdb-mysql。
users	String	参数解释: 账号名称。 取值范围: 不涉及。
query_sample	String	参数解释: 执行语法。 取值范围: 不涉及。
type	String	参数解释: 语句类型。 取值范围: <ul style="list-style-type: none">• INSERT• UPDATE• SELECT• DELETE• ALTER• DROP• CREATE。
start_time	String	参数解释: 发生时间, UTC时间。 取值范围: 不涉及。
client_ip	String	参数解释: IP地址。 取值范围: 不涉及。
line_num	String	参数解释: 日志单行序列号。 取值范围: 不涉及。

状态码: 400

表 4-688 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-689 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询慢日志详细信息。

```
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  
}
```

响应示例

状态码：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  
  } ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

查询慢日志详细信息。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListLtsSlowlogDetailsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLtsSlowlogDetailsRequest request = new ListLtsSlowlogDetailsRequest();
        request.withInstanceId("{instance_id}");
        LtsLogSlowQueryRequest body = new LtsLogSlowQueryRequest();
        body.withLineNum("1669344916000");
        body.withLimit(10);
        body.withEndTime("2022-11-29T00:00:00+0800");
        body.withStartTime("2022-11-20T00:00:00+0800");
        body.withNodeId("cc07c60e94ec4575989840e648fb4f66no07");
        request.withBody(body);
        try {
            ListLtsSlowlogDetailsResponse response = client.listLtsSlowlogDetails(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

查询慢日志详细信息。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListLtsSlowlogDetailsRequest()
        request.instance_id = "{instance_id}"
        request.body = LtsLogSlowQueryRequest(
            line_num="1669344916000",
            limit=10,
            end_time="2022-11-29T00:00:00+0800",
            start_time="2022-11-20T00:00:00+0800",
            node_id="cc07c60e94ec4575989840e648fb4f66no07"
        )
        response = client.list_lts_slowlog_details(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

查询慢日志详细信息。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
```

```
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListLtsSlowlogDetailsRequest{}
request.InstanceId = "{instance_id}"
lineNumLtsLogSlowQueryRequest := "1669344916000"
request.Body = &model.LtsLogSlowQueryRequest{
    LineNum: &lineNumLtsLogSlowQueryRequest,
    Limit: int32(10),
    EndTime: "2022-11-29T00:00:00+0800",
    StartTime: "2022-11-20T00:00:00+0800",
    NodeId: "cc07c60e94ec4575989840e648fb4f66no07",
}
response, err := client.ListLtsSlowlogDetails(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.4 获取错误日志详情列表

功能介绍

获取指定实例的错误日志详情列表。

调用方法

请参见[如何调用API](#)。

URI

POST /v3.1/{project_id}/instances/{instance_id}/error-logs

表 4-690 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-691 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-692 请求 Body 参数

参数	是否必选	参数类型	描述
node_id	是	String	节点ID。
start_time	是	String	开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。

参数	是否必选	参数类型	描述
end_time	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
limit	是	Integer	查询记录数。
line_num	否	String	日志单行序列号，第一次查询时不需要此参数，后续分页查询时需要使用，可从上次查询的返回信息中获取。
level	否	String	日志级别，默认为ALL。 取值范围： <ul style="list-style-type: none"> • ALL • INFO • LOG • WARNING • ERROR • FATAL • PANIC • NOTE

响应参数

状态码：200

表 4-693 响应 Body 参数

参数	参数类型	描述
error_log_list	Array of LtsLogErrorDetail objects	错误日志列表。

表 4-694 LtsLogErrorDetail

参数	参数类型	描述
node_id	String	节点ID。
time	String	执行时间。
level	String	日志级别。

参数	参数类型	描述
content	String	错误日志内容。
line_num	String	日志单行序列号。

状态码：400

表 4-695 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-696 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询错误日志详细信息。

```
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  
}
```

响应示例

状态码：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
}]
}
```

SDK 代码示例

SDK代码示例如下。

Java

查询错误日志详细信息。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListLtsErrorLogDetailsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListLtsErrorLogDetailsRequest request = new ListLtsErrorLogDetailsRequest();
        request.withInstanceId("{instance_id}");
        LtsLogErrorQueryRequest body = new LtsLogErrorQueryRequest();
        body.withLineNum("1669344916000");
        body.withLimit(10);
        body.withEndTime("2022-11-29T00:00:00+0800");
        body.withStartTime("2022-11-20T00:00:00+0800");
        body.withNodeId("cc07c60e94ec4575989840e648fb4f66no07");
        request.withBody(body);
        try {
            ListLtsErrorLogDetailsResponse response = client.listLtsErrorLogDetails(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}  
}
```

Python

查询错误日志详细信息。

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListLtsErrorLogDetailsRequest()  
        request.instance_id = "{instance_id}"  
        request.body = LtsLogErrorQueryRequest(  
            line_num="1669344916000",  
            limit=10,  
            end_time="2022-11-29T00:00:00+0800",  
            start_time="2022-11-20T00:00:00+0800",  
            node_id="cc07c60e94ec4575989840e648fb4f66no07"  
        )  
        response = client.list_lts_error_log_details(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

查询错误日志详细信息。

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListLtsErrorLogDetailsRequest{
    request.InstanceId = "{instance_id}"
    lineNumLtsLogErrorQueryRequest:= "1669344916000"
    request.Body = &model.LtsLogErrorQueryRequest{
        LineNum: &lineNumLtsLogErrorQueryRequest,
        Limit: int32(10),
        EndTime: "2022-11-29T00:00:00+0800",
        StartTime: "2022-11-20T00:00:00+0800",
        NodeId: "cc07c60e94ec4575989840e648fb4f66no07",
    }
}
response, err := client.ListLtsErrorLogDetails(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.5 获取全量 SQL 的临时下载链接

功能介绍

获取全量SQL的临时下载链接。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instance/{instance_id}/auditlog/download-link

表 4-697 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-698 Query 参数

参数	是否必选	参数类型	描述
start_time	是	String	开始时间，不得早于实例创建时间。格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
end_time	是	String	结束时间，不得晚于当前时间。格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
node_id	否	String	节点ID。 <ul style="list-style-type: none">若输入，则只获取该节点的全量SQL下载链接。若不输入，则获取该实例所有节点的全量SQL下载链接。
last_file_name	否	String	上次查询的最后一个文件的文件名。 <ul style="list-style-type: none">若输入，则从该文件名以后按字典顺序开始查询。若不输入，则从第一个文件开始查询。

参数	是否必选	参数类型	描述
limit	否	Integer	一次查询返回的文件数量。 默认值为10，取值范围：1~50之间的整数值。

请求参数

表 4-699 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-700 响应 Body 参数

参数	参数类型	描述
files	Array of FileInfo objects	获取到的全量SQL文件信息。

表 4-701 FileInfo

参数	参数类型	描述
name	String	文件名。
size	Long	文件大小，单位：KB。

参数	参数类型	描述
updated_time	String	SQL文件最后一次修改时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始，Z指时区偏移量，例如偏移1个小时显示为+0100。
download_link	String	文件下载链接。
link_expired_time	String	下载链接过期时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始，Z指时区偏移量，例如偏移1个小时显示为+0100。

状态码：400

表 4-702 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-703 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取全量SQL的临时下载链接。

```
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
```

响应示例

状态码：200

Success.

```
{  
  "files": [ {
```

```
"name" :  
"20230706023359_669a94abef9f4979b2dfba92f48f4042in07_b051c8f7b98f4deef88ba97c8daba9dno07_SQ  
LAudit_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"  
} ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListAuditLogDownloadLinkSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListAuditLogDownloadLinkRequest request = new ListAuditLogDownloadLinkRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ListAuditLogDownloadLinkResponse response = client.listAuditLogDownloadLink(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getHttpStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListAuditLogDownloadLinkRequest()
        request.instance_id = "{instance_id}"
        response = client.list_audit_log_download_link(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

```
WithCredential(auth).  
Build()  
  
request := &model.ListAuditLogDownloadLinkRequest{}  
request.InstanceId = "{instance_id}"  
response, err := client.ListAuditLogDownloadLink(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.6 查询实例 LTS 日志配置列表

功能介绍

查询实例LTS日志配置列表

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/logs/lts-configs

表 4-704 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-705 Query 参数

参数	是否必选	参数类型	描述
enterprise_project_id	否	String	企业项目ID。
instance_id	否	String	实例ID。
instance_name	否	String	实例名称
limit	否	String	查询记录数，默认值为10，最小为1，最大为100。
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询）。

请求参数

表 4-706 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-707 响应 Body 参数

参数	参数类型	描述
instance_lts_configs	Array of LtsConfigsV3 objects	实例LTS日志配置列表。

参数	参数类型	描述
total_count	Integer	总数。

表 4-708 LtsConfigsV3

参数	参数类型	描述
lts_configs	Array of LtsConfig objects	LTS配置列表。
instance	InstanceLtsBasicInfo object	实例信息。

表 4-709 LtsConfig

参数	参数类型	描述
log_type	String	日志类型。
lts_group_id	String	日志组ID。
lts_stream_id	String	日志流ID。
enabled	Boolean	是否开启。

表 4-710 InstanceLtsBasicInfo

参数	参数类型	描述
id	String	实例ID。
name	String	实例名称。
mode	String	实例类型。
engine_name	String	引擎名称。
engine_version	String	引擎版本。
status	String	状态。
enterprise_project_id	String	企业项目ID。
enterprise_project_name	String	企业项目名称。

状态码：400

表 4-711 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-712 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

null

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/logs/lts-configs
```

响应示例

状态码：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"
    }
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowLtsConfigsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowLtsConfigsRequest request = new ShowLtsConfigsRequest();
        try {
            ShowLtsConfigsResponse response = client.showLtsConfigs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```



```
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowLtsConfigsRequest()
    response = client.show_lts_configs(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowLtsConfigsRequest{}
    response, err := client.ShowLtsConfigs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.7 批量删除 LTS 日志配置

功能介绍

批量删除LTS日志配置

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/logs/lts-configs

表 4-713 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-714 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
Content-Type	是	String	内容类型。 取值: application/json。
X-Language	否	String	语言。

表 4-715 请求 Body 参数

参数	是否必选	参数类型	描述
log_configs	是	Array of InstanceDeleteLtsConfig objects	日志配置列表。

表 4-716 InstanceDeleteLtsConfig

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID。
log_type	是	String	日志类型。

响应参数

状态码: 400

表 4-717 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-718 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

批量删除LTS日志配置

```
DELETE https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/logs/lts-configs
{
  "log_configs": [ {
    "instance_id": "61a4ea66210545909d74a05c27a7179ein07",
    "log_type": "error_log"
  } ]
}
```

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

批量删除LTS日志配置

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteLtsConfigsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        DeleteLtsConfigsRequest request = new DeleteLtsConfigsRequest();
        DeleteLtsConfigsRequestBody body = new DeleteLtsConfigsRequestBody();
        List<InstanceDeleteLtsConfig> listbodyLogConfigs = new ArrayList<>();
        listbodyLogConfigs.add(
            new InstanceDeleteLtsConfig()
                .withInstanceId("61a4ea66210545909d74a05c27a7179ein07")
        );
    }
}
```

```
        .withLogType("error_log")
    );
    body.withLogConfigs(listbodyLogConfigs);
    request.withBody(body);
    try {
        DeleteLtsConfigsResponse response = client.deleteLtsConfigs(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

批量删除LTS日志配置

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteLtsConfigsRequest()
        listLogConfigsbody = [
            InstanceDeleteLtsConfig(
                instance_id="61a4ea66210545909d74a05c27a7179ein07",
                log_type="error_log"
            )
        ]
        request.body = DeleteLtsConfigsRequestBody(
            log_configs=listLogConfigsbody
        )
        response = client.delete_lts_configs(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

批量删除LTS日志配置

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteLtsConfigsRequest{}
    var listLogConfigbody = []model.InstanceDeleteLtsConfig{
        {
            InstanceId: "61a4ea66210545909d74a05c27a7179ein07",
            LogType: "error_log",
        },
    }
    request.Body = &model.DeleteLtsConfigsRequestBody{
        LogConfigs: listLogConfigbody,
    }
    response, err := client.DeleteLtsConfigs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.8 批量创建 LTS 日志配置

功能介绍

批量创建LTS日志配置

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/logs/lts-configs

表 4-719 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-720 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。

参数	是否必选	参数类型	描述
X-Language	否	String	语言。

表 4-721 请求 Body 参数

参数	是否必选	参数类型	描述
log_configs	是	Array of InstanceSaveLtsConfig objects	日志配置列表。

表 4-722 InstanceSaveLtsConfig

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID。
log_type	是	String	日志类型。
lts_group_id	是	String	日志组ID。
lts_stream_id	是	String	日志流ID。

响应参数

状态码：400

表 4-723 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-724 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

批量创建LTS日志配置

```
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"
  } ]
}
```

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

批量创建LTS日志配置

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateLtsConfigsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateLtsConfigsRequest request = new CreateLtsConfigsRequest();
        CreateLtsConfigs body = new CreateLtsConfigs();
        List<InstanceSaveLtsConfig> listbodyLogConfigs = new ArrayList<>();
        listbodyLogConfigs.add(
```

```
        new InstanceSaveLtsConfig()
            .withInstanceId("61a4ea66210545909d74a05c27a7179ein07")
            .withLogType("error_log")
            .withLtsGroupId("c3dd5233-24a1-443c-6b40-310b3ad85382")
            .withLtsStreamId("9b476e31-b745-4e76-8d78-2081168651f7")
        );
        body.withLogConfigs(listbodyLogConfigs);
        request.withBody(body);
        try {
            CreateLtsConfigsResponse response = client.createLtsConfigs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

批量创建LTS日志配置

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateLtsConfigsRequest()
        listLogConfigsbody = [
            InstanceSaveLtsConfig(
                instance_id="61a4ea66210545909d74a05c27a7179ein07",
                log_type="error_log",
                lts_group_id="c3dd5233-24a1-443c-6b40-310b3ad85382",
                lts_stream_id="9b476e31-b745-4e76-8d78-2081168651f7"
            )
        ]
        request.body = CreateLtsConfigs(
            log_configs=listLogConfigsbody
        )
        response = client.create_lts_configs(request)
        print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

批量创建LTS日志配置

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateLtsConfigsRequest{}
    var listLogConfigsbody = []model.InstanceSaveLtsConfig{
        {
            InstanceId: "61a4ea66210545909d74a05c27a7179ein07",
            LogType: "error_log",
            LtsGroupId: "c3dd5233-24a1-443c-6b40-310b3ad85382",
            LtsStreamId: "9b476e31-b745-4e76-8d78-2081168651f7",
        },
    }
    request.Body = &model.CreateLtsConfigs{
        LogConfigs: listLogConfigsbody,
    }
    response, err := client.CreateLtsConfigs(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.9 查询慢日志脱敏状态

功能介绍

查询慢日志脱敏状态

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/slowlog/query

表 4-725 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID。

请求参数

表 4-726 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

响应参数

状态码：200

表 4-727 响应 Body 参数

参数	参数类型	描述
open_slow_log_switch	Boolean	慢日志开关状态。

状态码：400

表 4-728 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-729 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

查询慢日志脱敏状态

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/  
61a4ea66210545909d74a05c27a7179ein07/slowlog/query
```

响应示例

状态码: 200

Success.

```
{  
  "open_slow_log_switch" : true  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowSlowlogSensitiveStatusSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ShowSlowlogSensitiveStatusRequest request = new ShowSlowlogSensitiveStatusRequest();  
        request.withInstanceId("{instance_id}");  
    }  
}
```

```
try {
    ShowSlowlogSensitiveStatusResponse response = client.showSlowlogSensitiveStatus(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowSlowlogSensitiveStatusRequest()
        request.instance_id = "{instance_id}"
        response = client.show_slowlog_sensitive_status(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
```

```
risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ShowSlowlogSensitiveStatusRequest{
    request.InstanceId = "{instance_id}"
}
response, err := client.ShowSlowlogSensitiveStatus(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.10 开启或关闭慢日志脱敏状态

功能介绍

开启或关闭慢日志脱敏状态

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/slowlog/modify

表 4-730 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID
instance_id	是	String	实例ID。

请求参数

表 4-731 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	语言。

表 4-732 请求 Body 参数

参数	是否必选	参数类型	描述
open_slow_log_switch	是	Boolean	慢日志开关状态。

响应参数

状态码：400

表 4-733 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-734 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

开启或关闭慢日志脱敏状态

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/61a4ea66210545909d74a05c27a7179ein07/slowlog/modify
{
  "open_slow_log_switch" : true
}
```

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

开启或关闭慢日志脱敏状态

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateSlowlogSensitiveSwitchSolution {
    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateSlowlogSensitiveSwitchRequest request = new UpdateSlowlogSensitiveSwitchRequest();
request.withInstanceId("{instance_id}");
UpdateSlowlogSensitiveSwitchRequestBody body = new UpdateSlowlogSensitiveSwitchRequestBody();
body.withOpenSlowLogSwitch(true);
request.withBody(body);
try {
    UpdateSlowlogSensitiveSwitchResponse response = client.updateSlowlogSensitiveSwitch(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

开启或关闭慢日志脱敏状态

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = UpdateSlowlogSensitiveSwitchRequest()
    request.instance_id = "{instance_id}"
    request.body = UpdateSlowlogSensitiveSwitchRequestBody(
        open_slow_log_switch=True
    )
    response = client.update_slowlog_sensitive_switch(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

开启或关闭慢日志脱敏状态

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateSlowlogSensitiveSwitchRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.UpdateSlowlogSensitiveSwitchRequestBody{
        OpenSlowLogSwitch: true,
    }
    response, err := client.UpdateSlowlogSensitiveSwitch(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.11 查询慢日志统计信息

功能介绍

查询慢日志统计信息

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/slow-logs/statistics

表 4-735 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-736 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-737 请求 Body 参数

参数	是否必选	参数类型	描述
limit	否	Integer	每页多少条记录（查询结果），取值范围是1~100，不填时默认为10。
offset	否	Integer	索引位置，偏移量。默认为0，表示从第一条数据开始查询。
node_id	是	String	节点ID。
type	否	String	语句类型，取空值，表示查询所有语句类型。 枚举值： <ul style="list-style-type: none">INSERTUPDATESELECTDELETECREATEALL
database	否	String	数据库名称。数据库名称不支持包含特殊字符 < > & 等的搜索。

参数	是否必选	参数类型	描述
start_time	是	String	开始日期，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_time	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。只能查询当前时间前一个月内的慢日志。
sort	否	String	指定排序字段。 <ul style="list-style-type: none"> executeTime: 表示按照平均执行时间降序排序。 字段为空或传入其他值，表示按照执行次数降序排序。
order	否	String	排序顺序。默认desc。 枚举值： <ul style="list-style-type: none"> desc asc

响应参数

状态码：200

表 4-738 响应 Body 参数

参数	参数类型	描述
slow_log_list	Array of ShowSlowLogStatisticsItem objects	慢日志统计信息列表。
total_count	Integer	总条数。

表 4-739 ShowSlowLogStatisticsItem

参数	参数类型	描述
client_ip	String	IP地址。
count	String	执行次数。

参数	参数类型	描述
database	String	所属数据库。
lock_time	String	平均等待锁时间。
node_id	String	节点ID。
query_sample	String	执行语法。
rows_examined	Integer	平均扫描的行数量。
rows_sent	Integer	平均结果行统计数量。
time	String	平均执行时间。
type	String	语句类型。
users	String	账号。

状态码：400

表 4-740 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-741 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询慢日志统计信息。

```
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"  
}
```

响应示例

状态码: 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  
}
```

SDK 代码示例

SDK代码示例如下。

Java

查询慢日志统计信息。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowSlowLogStatisticsSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);
```

```
GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowSlowLogStatisticsRequest request = new ShowSlowLogStatisticsRequest();
request.withInstanceId("{instance_id}");
ShowSlowLogStatisticsRequestBody body = new ShowSlowLogStatisticsRequestBody();
body.withOrder("desc");
body.withEndTime("2024-08-16T16:51:22+0800");
body.withStartTime("2024-08-16T14:37:00+0800");
body.withNodeId("4006312b96c541749d735c20e86dd169no07");
body.withOffset(0);
body.withLimit(10);
request.withBody(body);
try {
    ShowSlowLogStatisticsResponse response = client.showSlowLogStatistics(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

查询慢日志统计信息。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowSlowLogStatisticsRequest()
        request.instance_id = "{instance_id}"
        request.body = ShowSlowLogStatisticsRequestBody(
            order="desc",
            end_time="2024-08-16T16:51:22+0800",
            start_time="2024-08-16T14:37:00+0800",
            node_id="4006312b96c541749d735c20e86dd169no07",
            offset=0,
        )
```

```
        limit=10
    )
    response = client.show_slow_log_statistics(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

查询慢日志统计信息。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowSlowLogStatisticsRequest{
        request.InstanceId = "{instance_id}"
        orderShowSlowLogStatisticsRequestBody:= "desc"
        offsetShowSlowLogStatisticsRequestBody:= int32(0)
        limitShowSlowLogStatisticsRequestBody:= int32(10)
        request.Body = &model.ShowSlowLogStatisticsRequestBody{
            Order: &orderShowSlowLogStatisticsRequestBody,
            EndTime: "2024-08-16T16:51:22+0800",
            StartTime: "2024-08-16T14:37:00+0800",
            NodeId: "4006312b96c541749d735c20e86dd169no07",
            Offset: &offsetShowSlowLogStatisticsRequestBody,
            Limit: &limitShowSlowLogStatisticsRequestBody,
        }
    }
    response, err := client.ShowSlowLogStatistics(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.8.12 获取慢日志下载链接

功能介绍

获取慢日志下载链接

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/{node_id}/slowlog-download

表 4-742 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
node_id	是	String	节点ID。

请求参数

表 4-743 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-744 响应 Body 参数

参数	参数类型	描述
list	Array of DownloadSlowLogFileItem objects	慢日志下载链接列表。
count	Integer	条数。

表 4-745 DownloadSlowLogFileItem

参数	参数类型	描述
job_id	String	任务ID。
file_name	String	文件名。
status	String	状态。 取值范围： <ul style="list-style-type: none">SUCCESS：表示下载链接已经生成完成。EXPORTING：表示下载链接正在生成中。FAILED：表示下载链接生成失败。

参数	参数类型	描述
file_size	String	文件大小, 单位: KB。
file_link	String	下载链接。链接有效时间为5分钟。
create_at	Long	创建时间。
updated_at	Long	更新时间。

状态码: 400

表 4-746 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-747 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取慢日志下载链接。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
6754902da1f447269c6979b0590102a5in07/941d21130b3c4899ad1a752a0945befdno07/slowlog-download
```

响应示例

状态码: 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-  
ea3ffcdb5cc4b5789a77884f9*****/  
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
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DownloadSlowLogFileSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DownloadSlowLogFileRequest request = new DownloadSlowLogFileRequest();
        request.withInstanceId("{instance_id}");
        request.withNodeId("{node_id}");
        try {
            DownloadSlowLogFileResponse response = client.downloadSlowLogFile(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DownloadSlowLogFileRequest()
        request.instance_id = "{instance_id}"
        request.node_id = "{node_id}"
        response = client.download_slow_log_file(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
```



```
WithRegion(region.ValueOf("<YOUR REGION>")).  
WithCredential(auth).  
Build()  
  
request := &model.DownloadSlowLogFileRequest{}  
request.InstanceId = "{instance_id}"  
request.NodeId = "{node_id}"  
response, err := client.DownloadSlowLogFile(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.9 标签管理

4.9.1 查询资源标签

功能介绍

查询指定实例的标签信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/tags

表 4-748 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-749 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-750 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-751 响应 Body 参数

参数	参数类型	描述
total_count	Integer	总记录数。
tags	Array of ResourceTagItem objects	标签列表。

表 4-752 ResourceTagItem

参数	参数类型	描述
key	String	标签键。
value	String	标签值。

状态码: 400

表 4-753 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-754 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询资源标签。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
61a4ea66210545909d74a05c27a7179ein07/tags?offset=0&limit=2
```

响应示例

状态码: 200

Success.

```
{
  "total_count": 2,
  "tags": [ {
    "key": "key1",
    "value": "value1"
  }, {
    "key": "key2",
    "value": "value2"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListInstanceTagsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListInstanceTagsRequest request = new ListInstanceTagsRequest();
        request.withInstanceId("{instance_id}");
        try {
            ListInstanceTagsResponse response = client.listInstanceTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListInstanceTagsRequest()  
        request.instance_id = "{instance_id}"  
        response = client.list_instance_tags(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()
```

```
client := gaussdb.NewGaussDBClient(  
    gaussdb.GaussDBClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.ListInstanceTagsRequest{}  
request.InstanceId = "{instance_id}"  
response, err := client.ListInstanceTags(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.9.2 查询项目标签

功能介绍

查询指定project ID下实例的所有标签集合。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/tags

表 4-755 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-756 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-757 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-758 响应 Body 参数

参数	参数类型	描述
total_count	Integer	总记录数。
tags	Array of ProjectTagItem objects	标签列表。

表 4-759 ProjectTagItem

参数	参数类型	描述
key	String	标签键。
values	Array of strings	标签值。

状态码：400

表 4-760 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-761 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询项目标签。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/tags?offset=0&limit=2
```

响应示例

状态码：200

Success.


```
{
  "total_count": 2,
  "tags": [ {
    "key": "key1",
    "values": [ "value1", "value2" ]
  }, {
    "key": "key2",
    "values": [ "value3", "value4" ]
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListProjectTagsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListProjectTagsRequest request = new ListProjectTagsRequest();
        try {
            ListProjectTagsResponse response = client.listProjectTags(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListProjectTagsRequest()
        response = client.list_project_tags(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```

```
Build()  
  
request := &model.ListProjectTagsRequest{}  
response, err := client.ListProjectTags(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.9.3 批量添加或删除标签

功能介绍

批量添加或删除指定实例的标签。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/tags/action

表 4-762 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-763 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-764 请求 Body 参数

参数	是否必选	参数类型	描述
action	是	String	操作标识，取值： <ul style="list-style-type: none">create：表示添加标签。delete：表示删除标签。
tags	是	Array of TagItem objects	标签列表。

表 4-765 TagItem

参数	是否必选	参数类型	描述
key	是	String	标签键。最大长度36个unicode字符，不能为null或者空字符串，不能为空格。 字符集：0-9，A-Z，a-z，“_”，“-”，中文。

参数	是否必选	参数类型	描述
value	否	String	标签值。最大长度43个unicode字符，可以为空字符串，不能为空格。 字符集：0-9，A-Z，a-z， “_”，“.”，“-”，中文。 <ul style="list-style-type: none">“action”值为“create”时，该参数必选。“action”值为“delete”时，如果value有值，按照key-value删除，如果value没值，则按照key删除。

响应参数

状态码：400

表 4-766 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-767 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 批量添加标签。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
61a4ea66210545909d74a05c27a7179ein07/tags/action
```

```
{  
  "action": "create",  
  "tags": [{  
    "key": "key1",  
    "value": "value1"  
  }, {  
    "key": "key2",  
    "value": "value2"  
  }  
}
```

```
}]  
}
```

- 批量删除标签。

POST <https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/61a4ea66210545909d74a05c27a7179ein07/tags/action>

```
{  
  "action" : "delete",  
  "tags" : [{  
    "key" : "key1"  
  }, {  
    "key" : "key2",  
    "value" : "value2"  
  }]  
}
```

响应示例

无

SDK 代码示例

SDK代码示例如下。

Java

- 批量添加标签。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class BatchTagActionSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before  
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local  
        // environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        BatchTagActionRequest request = new BatchTagActionRequest();  
        request.withInstanceId("{instance_id}");  
    }  
}
```

```
BatchOperateInstanceTagRequestBody body = new BatchOperateInstanceTagRequestBody();
List<TagItem> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new TagItem()
        .withKey("key1")
        .withValue("value1")
);
listbodyTags.add(
    new TagItem()
        .withKey("key2")
        .withValue("value2")
);
body.withTags(listbodyTags);
body.withAction("create");
request.withBody(body);
try {
    BatchTagActionResponse response = client.batchTagAction(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

- **批量删除标签。**

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class BatchTagActionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        BatchTagActionRequest request = new BatchTagActionRequest();
```

```
request.withInstanceId("{instance_id}");
BatchOperateInstanceTagRequestBody body = new BatchOperateInstanceTagRequestBody();
List<TagItem> listbodyTags = new ArrayList<>();
listbodyTags.add(
    new TagItem()
        .withKey("key1")
);
listbodyTags.add(
    new TagItem()
        .withKey("key2")
        .withValue("value2")
);
body.withTags(listbodyTags);
body.withAction("delete");
request.withBody(body);
try {
    BatchTagActionResponse response = client.batchTagAction(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 批量添加标签。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchTagActionRequest()
        request.instance_id = "{instance_id}"
        listTagsbody = [
            TagItem(
                key="key1",
                value="value1"
            ),
        ],
```



```
        TagItem(
            key="key2",
            value="value2"
        )
    ]
    request.body = BatchOperateInstanceTagRequestBody(
        tags=listTagsbody,
        action="create"
    )
    response = client.batch_tag_action(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 批量删除标签。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = BatchTagActionRequest()
        request.instance_id = "{instance_id}"
        listTagsbody = [
            TagItem(
                key="key1"
            ),
            TagItem(
                key="key2",
                value="value2"
            )
        ]
        request.body = BatchOperateInstanceTagRequestBody(
            tags=listTagsbody,
            action="delete"
        )
        response = client.batch_tag_action(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 批量添加标签。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchTagActionRequest{
        request.InstanceId = "{instance_id}"
        valueTags:= "value1"
        valueTags1:= "value2"
        var listTagsbody = []model.TagItem{
            {
                Key: "key1",
                Value: &valueTags,
            },
            {
                Key: "key2",
                Value: &valueTags1,
            },
        }
    }
    request.Body = &model.BatchOperateInstanceTagRequestBody{
        Tags: listTagsbody,
        Action: "create",
    }
    response, err := client.BatchTagAction(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 批量删除标签。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
```

```
"github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.BatchTagActionRequest{}
    request.InstanceId = "{instance_id}"
    valueTags := "value2"
    var listTagsbody = []model.TagItem{
        {
            Key: "key1",
        },
        {
            Key: "key2",
            Value: &valueTags,
        },
    }
    request.Body = &model.BatchOperateInstanceTagRequestBody{
        Tags: listTagsbody,
        Action: "delete",
    }
    response, err := client.BatchTagAction(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10 数据库用户管理

4.10.1 创建数据库用户

功能介绍

创建云数据库TaurusDB实例数据库用户。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/db-users

表 4-768 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,且长度为32个字符。 默认值: 不涉及。
instance_id	是	String	参数解释: 实例ID,此参数是实例的唯一标识。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,后缀为in07,长度为36个字符。 默认取值: 不涉及。

请求参数

表 4-769 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释: 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>
X-Language	否	String	<p>参数解释: 请求语言类型。</p> <p>约束限制: 不涉及。</p> <p>取值范围:</p> <ul style="list-style-type: none"> • en-us • zh-cn <p>默认值: en-us。</p>

表 4-770 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of CreateDatabaseUserList objects	<p>参数解释: 数据库用户列表，列表最大长度为50。</p>

表 4-771 CreateDatabaseUserList

参数	是否必选	参数类型	描述
name	是	String	参数解释: 数据库用户名称。 约束限制: 不涉及。 取值范围: 数据库用户名称在1到32个字符之间, 由字母、数字、下划线组成, 不能包含其他特殊字符。 默认取值: 不涉及。
password	是	String	参数解释: 数据库用户密码。 约束限制: 不能同用户名称相同, 非空。建议您输入高强度密码, 以提高安全性, 防止出现密码被暴力破解等安全风险。 取值范围: 至少包含以下字符中的三种: 大写字母、小写字母、数字和特殊符号 . ~!@#%&^*_=-+?,()&组成, 长度8~32个字符。 默认取值: 不涉及。
comment	否	String	参数解释: 数据库备注。 约束限制: 该字段只针对新版本的实例生效, 必须大于等于指定的内核版本-2.0.13.0, 如果不符合内核版本要求, 参考 内核版本升级 至最新。 取值范围: 长度不能超过512个字符, 不能包含回车和特殊字符!<"='>&。 默认取值: 不涉及。

参数	是否必选	参数类型	描述
hosts	否	Array of strings	<p>参数解释: 主机IP地址，即允许数据库用户当前主机连接数据库。</p> <p>约束限制: 一次最多创建50个。</p> <p>取值范围: %和IP地址，若IP地址为“10.10.10.%”，则表示10.10.10.X的IP地址都可以访问该TaurusDB实例。若您需要添加多个IP地址，请用英文逗号隔开（逗号前后都不能加空格），例如 192.168.0.1,172.16.213.9。</p> <p>默认取值: 默认IP地址为%，表示允许所有地址访问TaurusDB实例。</p>
databases	否	Array of CreateDatabaseList objects	<p>参数解释: 数据库名称列表，即创建数据库用户时同步将列表中的数据库授权给用户，列表最大长度为50。列表可以为空，在需要给该用户授权某数据库时，调用数据库用户授权接口即可。</p>

表 4-772 CreateDatabaseList

参数	是否必选	参数类型	描述
name	是	String	<p>参数解释: 数据库名称。</p> <p>约束限制: 当前已存在的数据库。</p> <p>取值范围: 数据库名称长度可在1~64个字符之间，由字母、数字、下划线、中划线组成，中划线的累计总长度小于等于10个字符，且不能包含其他特殊字符。</p> <p>默认值: 不涉及。</p>

参数	是否必选	参数类型	描述
readonly	是	Boolean	参数解释: 是否为只读权限。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• true: 表示只读。• false: 表示可读写。 默认值: 不涉及。

响应参数

状态码: 201

表 4-773 响应 Body 参数

参数	参数类型	描述
job_id	String	参数解释: 创建数据库用户的任务ID。 取值范围: 符合UUID规则。

状态码: 400

表 4-774 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-775 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建数据库用户，读写权限，主机IP地址是127.0.0.1。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users
```

```
{  
  "users" : [ {  
    "name" : "gaussdb_mysql_user1",  
    "password" : "****",  
    "hosts" : [ "127.0.0.1" ],  
    "comment" : "database_user_comment",  
    "databases" : [ {  
      "name" : "test",  
      "readonly" : false  
    } ]  
  } ]  
}
```

响应示例

状态码：201

Success.

```
{  
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建数据库用户，读写权限，主机IP地址是127.0.0.1。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class CreateGaussMySQLDatabaseUserSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)
```

```
.withAk(ak)
.withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
CreateGaussMySQLDatabaseUserRequest request = new CreateGaussMySQLDatabaseUserRequest();
request.withInstanceId("{instance_id}");
CreateDatabaseUserRequest body = new CreateDatabaseUserRequest();
List<CreateDatabaseList> listUsersDatabases = new ArrayList<>();
listUsersDatabases.add(
    new CreateDatabaseList()
        .withName("test")
        .withReadOnly(false)
);
List<String> listUsersHosts = new ArrayList<>();
listUsersHosts.add("127.0.0.1");
List<CreateDatabaseUserList> listbodyUsers = new ArrayList<>();
listbodyUsers.add(
    new CreateDatabaseUserList()
        .withName("gaussdb_mysql_user1")
        .withComment("database_user_comment")
        .withPassword("****")
        .withHosts(listUsersHosts)
        .withDatabases(listUsersDatabases)
);
body.withUsers(listbodyUsers);
request.withBody(body);
try {
    CreateGaussMySQLDatabaseUserResponse response =
client.createGaussMySQLDatabaseUser(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

创建数据库用户，读写权限，主机IP地址是127.0.0.1。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateGaussMySQLDatabaseUserRequest()
    request.instance_id = "{instance_id}"
    listDatabasesUsers = [
        CreateDatabaseList(
            name="test",
            readonly=False
        )
    ]
    listHostsUsers = [
        "127.0.0.1"
    ]
    listUsersbody = [
        CreateDatabaseUserList(
            name="gaussdb_mysql_user1",
            comment="database_user_comment",
            password="****",
            hosts=listHostsUsers,
            databases=listDatabasesUsers
        )
    ]
    request.body = CreateDatabaseUserRequest(
        users=listUsersbody
    )
    response = client.create_gauss_my_sql_database_user(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

创建数据库用户，读写权限，主机IP地址是127.0.0.1。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()
```

```
client := gaussdb.NewGaussDBClient(  
    gaussdb.GaussDBClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.CreateGaussMySQLDatabaseUserRequest{}  
request.InstanceId = "{instance_id}"  
var listDatabasesUsers = []model.CreateDatabaseList{  
    {  
        Name: "test",  
        Readonly: false,  
    },  
}  
var listHostsUsers = []string{  
    "127.0.0.1",  
}  
commentUsers := "database_user_comment"  
var listUsersbody = []model.CreateDatabaseUserList{  
    {  
        Name: "gaussdb_mysql_user1",  
        Comment: &commentUsers,  
        Password: "****",  
        Hosts: &listHostsUsers,  
        Databases: &listDatabasesUsers,  
    },  
}  
request.Body = &model.CreateDatabaseUserRequest{  
    Users: listUsersbody,  
}  
response, err := client.CreateGaussMySQLDatabaseUser(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.2 查询数据库用户

功能介绍

查询云数据库 TaurusDB实例数据库用户。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/db-users

表 4-776 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-777 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-778 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-779 响应 Body 参数

参数	参数类型	描述
users	Array of ListGaussMySqlDatabaseUser objects	数据库用户列表。
total_count	Integer	实例的数据库用户总数

表 4-780 ListGaussMySqlDatabaseUser

参数	参数类型	描述
name	String	数据库用户名。
host	String	主机地址。
comment	String	数据库用户备注。
databases	Array of ListGaussMySqlDatabase objects	数据库列表。

表 4-781 ListGaussMySqlDatabase

参数	参数类型	描述
name	String	数据库名称。
readonly	Boolean	是否为只读权限： <ul style="list-style-type: none">• true: 表示只读。• false: 表示可读写。

状态码: 400

表 4-782 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-783 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询数据库用户列表。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users?offset=0&limit=100
```

响应示例

状态码: 200

Success.

```
{  
  "users": [{  
    "name": "gaussdb_mysql_user1",  
    "host": "127.0.0.1",  
    "comment": "database_user_comment",  
    "databases": [{  
      "name": "test",  
      "readonly": false  
    }]  
  }]  
}
```

```
    }],  
    "total_count" : 1  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListGaussMySQLDatabaseUserSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListGaussMySQLDatabaseUserRequest request = new ListGaussMySQLDatabaseUserRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ListGaussMySQLDatabaseUserResponse response = client.listGaussMySQLDatabaseUser(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
import os
```



```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListGaussMySQLDatabaseUserRequest()
        request.instance_id = "{instance_id}"
        response = client.list_gauss_my_sql_database_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGaussMySQLDatabaseUserRequest{}
    request.InstanceId = "{instance_id}"
```

```
response, err := client.ListGaussMySqlDatabaseUser(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.3 删除数据库用户

功能介绍

删除云数据库 TaurusDB实例数据库用户。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/db-users

表 4-784 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-785 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-786 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of ListDeleteDatabaseUserRequest objects	准备删除的数据库用户列表，列表最大长度为50。

表 4-787 ListDeleteDatabaseUserRequest

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。
host	是	String	主机地址。

响应参数

状态码：202

表 4-788 响应 Body 参数

参数	参数类型	描述
job_id	String	删除数据库用户的任务ID。

状态码：400

表 4-789 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-790 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除主机地址是"127.0.0.1"的数据库用户。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users
```

```
{  
  "users" : [{  
    "name" : "gaussdb_mysql_user1",  
    "host" : "127.0.0.1"  
  }]  
}
```

响应示例

状态码：202

Success.

```
{  
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除主机地址是"127.0.0.1"的数据库用户。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteGaussMySQLDatabaseUserSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteGaussMySQLDatabaseUserRequest request = new DeleteGaussMySQLDatabaseUserRequest();
        request.withInstanceId("{instance_id}");
        DeleteDatabaseUserRequest body = new DeleteDatabaseUserRequest();
        List<ListDeleteDatabaseUserRequest> listbodyUsers = new ArrayList<>();
        listbodyUsers.add(
            new ListDeleteDatabaseUserRequest()
                .withName("gaussdb_mysql_user1")
                .withHost("127.0.0.1")
        );
        body.withUsers(listbodyUsers);
        request.withBody(body);
        try {
            DeleteGaussMySQLDatabaseUserResponse response =
            client.deleteGaussMySQLDatabaseUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除主机地址是"127.0.0.1"的数据库用户。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
```

```
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteGaussMySQLDatabaseUserRequest()
        request.instance_id = "{instance_id}"
        listUsersbody = [
            ListDeleteDatabaseUserRequest(
                name="gaussdb_mysql_user1",
                host="127.0.0.1"
            )
        ]
        request.body = DeleteDatabaseUserRequest(
            users=listUsersbody
        )
        response = client.delete_gauss_my_sql_database_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除主机地址是"127.0.0.1"的数据库用户。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
```

```
Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.DeleteGaussMySQLDatabaseUserRequest{}
request.InstanceId = "{instance_id}"
var listUsersbody = []model.ListDeleteDatabaseUserRequest{
    {
        Name: "gaussdb_mysql_user1",
        Host: "127.0.0.1",
    },
}
request.Body = &model.DeleteDatabaseUserRequest{
    Users: listUsersbody,
}
response, err := client.DeleteGaussMySQLDatabaseUser(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.4 修改数据库用户备注

功能介绍

修改云数据库 TaurusDB实例数据库用户备注。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/db-users/comment

表 4-791 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-792 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-793 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of UpdateDatabaseUserComment objects	准备修改备注的数据库用户列表，列表最大长度为50。

表 4-794 UpdateDatabaseUserComment

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。

参数	是否必选	参数类型	描述
host	是	String	主机地址。
comment	是	String	数据库用户备注,长度不能超过512个字符,不能包含回车和特殊字符!<"='>&。 该字段只针对新版本的实例生效,必须大于等于指定的内核版本-2.0.13.0,不符合内核版本要求,参考 升级内核版本 升级至最新。

响应参数

状态码：202

表 4-795 响应 Body 参数

参数	参数类型	描述
job_id	String	修改数据库用户备注的任务ID。

状态码：400

表 4-796 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-797 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改数据库用户的备注。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/comment  
  
{  
  "users": [{  
    "name": "gaussdb_mysql_user1",  
    "host": "127.0.0.1",  
    "comment": "first_database_user"  
  }]  
}
```

响应示例

状态码: 202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改数据库用户的备注。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class UpdateGaussMySQLDatabaseUserCommentSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateGaussMySQLDatabaseUserCommentRequest request = new  
        UpdateGaussMySQLDatabaseUserCommentRequest();
```

```
request.withInstanceId("{instance_id}");
UpdateDatabaseUserCommentRequest body = new UpdateDatabaseUserCommentRequest();
List<UpdateDatabaseUserComment> listbodyUsers = new ArrayList<>();
listbodyUsers.add(
    new UpdateDatabaseUserComment()
        .withName("gaussdb_mysql_user1")
        .withHost("127.0.0.1")
        .withComment("first_database_user")
);
body.withUsers(listbodyUsers);
request.withBody(body);
try {
    UpdateGaussMySQLDatabaseUserCommentResponse response =
client.updateGaussMySQLDatabaseUserComment(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改数据库用户的备注。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateGaussMySQLDatabaseUserCommentRequest()
        request.instance_id = "{instance_id}"
        listUsersbody = [
            UpdateDatabaseUserComment(
                name="gaussdb_mysql_user1",
                host="127.0.0.1",
                comment="first_database_user"
            )
        ]
        request.body = UpdateDatabaseUserCommentRequest(
```

```
        users=listUsersbody
    )
    response = client.update_gauss_my_sql_database_user_comment(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改数据库用户的备注。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateGaussMySQLDatabaseUserCommentRequest{}
    request.InstanceId = "{instance_id}"
    var listUsersbody = []model.UpdateDatabaseUserComment{
        {
            Name: "gaussdb_mysql_user1",
            Host: "127.0.0.1",
            Comment: "first_database_user",
        },
    }
    request.Body = &model.UpdateDatabaseUserCommentRequest{
        Users: listUsersbody,
    }
    response, err := client.UpdateGaussMySQLDatabaseUserComment(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.5 修改数据库用户密码

功能介绍

修改云数据库 TaurusDB实例数据库用户密码。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/db-users/password

表 4-798 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-799 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-800 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of ResetDatabasePassword objects	准备修改密码的数据库用户列表，列表最大长度为50。

表 4-801 ResetDatabasePassword

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。
host	是	String	主机地址。
password	是	String	数据库用户密码，非空，至少包含以下字符中的三种：大写字母、小写字母、数字和特殊符号 .!@#\$%^*_-=+?,()&组成，长度8~32个字符。建议您输入高强度密码，以提高安全性，防止出现密码被暴力破解等安全风险

响应参数

状态码：202

表 4-802 响应 Body 参数

参数	参数类型	描述
job_id	String	修改数据库用户密码的任务ID。

状态码：400

表 4-803 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-804 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改数据库用户“gaussdb_mysql_user1”的密码。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/db-users/password
```

```
{  
  "users": [{  
    "name": "gaussdb_mysql_user1",  
    "host": "127.0.0.1",  
    "password": "****"  
  }]  
}
```

响应示例

状态码：202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改数据库用户 “gaussdb_mysql_user1” 的密码。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class ResetGaussMySqlDatabasePasswordSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        ResetGaussMySqlDatabasePasswordRequest request = new
        ResetGaussMySqlDatabasePasswordRequest();
        request.withInstanceId("{instance_id}");
        ResetDatabasePasswordRequest body = new ResetDatabasePasswordRequest();
        List<ResetDatabasePassword> listbodyUsers = new ArrayList<>();
        listbodyUsers.add(
            new ResetDatabasePassword()
                .withName("gaussdb_mysql_user1")
                .withHost("127.0.0.1")
                .withPassword("****")
        );
        body.withUsers(listbodyUsers);
        request.withBody(body);
        try {
            ResetGaussMySqlDatabasePasswordResponse response =
            client.resetGaussMySqlDatabasePassword(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
        }
    }
}
```



```
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

修改数据库用户 “gaussdb_mysql_user1” 的密码。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ResetGaussMySqlDatabasePasswordRequest()
        request.instance_id = "{instance_id}"
        listUsersbody = [
            ResetDatabasePassword(
                name="gaussdb_mysql_user1",
                host="127.0.0.1",
                password="****"
            )
        ]
        request.body = ResetDatabasePasswordRequest(
            users=listUsersbody
        )
        response = client.reset_gauss_my_sql_database_password(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

修改数据库用户 “gaussdb_mysql_user1” 的密码。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build()  
    )  
  
    request := &model.ResetGaussMySqlDatabasePasswordRequest{}  
    request.InstanceId = "{instance_id}"  
    var listUsersbody = []model.ResetDatabasePassword{  
        {  
            Name: "gaussdb_mysql_user1",  
            Host: "127.0.0.1",  
            Password: "****",  
        },  
    }  
    request.Body = &model.ResetDatabasePasswordRequest{  
        Users: listUsersbody,  
    }  
    response, err := client.ResetGaussMySqlDatabasePassword(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.6 授予数据库用户数据库权限

功能介绍

授予云数据库 TaurusDB实例数据库用户数据库权限。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/db-users/privilege

表 4-805 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-806 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-807 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of GrantDatabasePermission objects	数据库用户列表，列表最大长度为50。

表 4-808 GrantDatabasePermission

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。
host	是	String	主机地址。
databases	是	Array of DatabasePermission objects	数据库权限列表，列表最大长度为50。

表 4-809 DatabasePermission

参数	是否必选	参数类型	描述
name	是	String	数据库名称。
readonly	是	Boolean	是否为只读权限： <ul style="list-style-type: none">• true: 表示只读。• false: 表示可读写。

响应参数

状态码：201

表 4-810 响应 Body 参数

参数	参数类型	描述
job_id	String	授予用户权限的任务ID。

状态码：400

表 4-811 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-812 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 授予数据库用户数据库读写权限。

```
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
    } ]
  } ]
}
```

- 授予数据库用户数据库只读权限。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/a23fb62bd61e4e9e9636fd2225f395bein07/db-users/privilege
```

```
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "host": "127.0.0.1",
    "databases": [ {
      "name": "test",
      "readonly": true
    } ]
  } ]
}
```

响应示例

状态码: 201

Success.

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 授予数据库用户数据库读写权限。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddDatabasePermissionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        AddDatabasePermissionRequest request = new AddDatabasePermissionRequest();
        request.withInstanceId("{instance_id}");
        GrantDatabasePermissionRequestBody body = new GrantDatabasePermissionRequestBody();
        List<DatabasePermission> listUsersDatabases = new ArrayList<>();
        listUsersDatabases.add(
            new DatabasePermission()
                .withName("test")
                .withReadOnly(false)
        );
        List<GrantDatabasePermission> listbodyUsers = new ArrayList<>();
        listbodyUsers.add(
            new GrantDatabasePermission()
                .withName("gaussdb_mysql_user1")
                .withHost("127.0.0.1")
                .withDatabases(listUsersDatabases)
        );
        body.withUsers(listbodyUsers);
        request.withBody(body);
        try {
            AddDatabasePermissionResponse response = client.addDatabasePermission(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        }
    }
}
```

```
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

- 授予数据库用户数据库只读权限。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class AddDatabasePermissionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        AddDatabasePermissionRequest request = new AddDatabasePermissionRequest();
        request.withInstanceId("{instance_id}");
        GrantDatabasePermissionRequestBody body = new GrantDatabasePermissionRequestBody();
        List<DatabasePermission> listUsersDatabases = new ArrayList<>();
        listUsersDatabases.add(
            new DatabasePermission()
                .withName("test")
                .withReadOnly(true)
        );
        List<GrantDatabasePermission> listbodyUsers = new ArrayList<>();
        listbodyUsers.add(
            new GrantDatabasePermission()
                .withName("gaussdb_mysql_user1")
                .withHost("127.0.0.1")
                .withDatabases(listUsersDatabases)
        );
        body.withUsers(listbodyUsers);
        request.withBody(body);
        try {
            AddDatabasePermissionResponse response = client.addDatabasePermission(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        }
    }
}
```

```
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

- 授予数据库用户数据库读写权限。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddDatabasePermissionRequest()
        request.instance_id = "{instance_id}"
        listDatabasesUsers = [
            DatabasePermission(
                name="test",
                readonly=False
            )
        ]
        listUsersbody = [
            GrantDatabasePermission(
                name="gaussdb_mysql_user1",
                host="127.0.0.1",
                databases=listDatabasesUsers
            )
        ]
        request.body = GrantDatabasePermissionRequestBody(
            users=listUsersbody
        )
        response = client.add_database_permission(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```


- 授予数据库用户数据库只读权限。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = AddDatabasePermissionRequest()
        request.instance_id = "{instance_id}"
        listDatabasesUsers = [
            DatabasePermission(
                name="test",
                readonly=True
            )
        ]
        listUsersbody = [
            GrantDatabasePermission(
                name="gaussdb_mysql_user1",
                host="127.0.0.1",
                databases=listDatabasesUsers
            )
        ]
        request.body = GrantDatabasePermissionRequestBody(
            users=listUsersbody
        )
        response = client.add_database_permission(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 授予数据库用户数据库读写权限。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.AddDatabasePermissionRequest{}
request.InstanceId = "{instance_id}"
var listDatabasesUsers = []model.DatabasePermission{
    {
        Name: "test",
        Readonly: false,
    },
}
var listUsersbody = []model.GrantDatabasePermission{
    {
        Name: "gaussdb_mysql_user1",
        Host: "127.0.0.1",
        Databases: listDatabasesUsers,
    },
}
request.Body = &model.GrantDatabasePermissionRequestBody{
    Users: listUsersbody,
}
response, err := client.AddDatabasePermission(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 授予数据库用户数据库只读权限。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"
```

```
auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.AddDatabasePermissionRequest{}
request.InstanceId = "{instance_id}"
var listDatabasesUsers = []model.DatabasePermission{
    {
        Name: "test",
        Readonly: true,
    },
}
var listUsersbody = []model.GrantDatabasePermission{
    {
        Name: "gaussdb_mysql_user1",
        Host: "127.0.0.1",
        Databases: listDatabasesUsers,
    },
}
request.Body = &model.GrantDatabasePermissionRequestBody{
    Users: listUsersbody,
}
response, err := client.AddDatabasePermission(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.10.7 删除数据库用户的数据库权限

功能介绍

删除云数据库 TaurusDB实例数据库用户的数据库权限。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/db-users/privilege

表 4-813 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-814 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-815 请求 Body 参数

参数	是否必选	参数类型	描述
users	是	Array of DeleteDatabasePermission objects	数据库用户列表，列表最大长度为50。

表 4-816 DeleteDatabasePermission

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。
host	是	String	主机地址。
databases	是	Array of strings	数据库列表。

响应参数

状态码：202

表 4-817 响应 Body 参数

参数	参数类型	描述
job_id	String	删除数据库用户的数据库权限任务ID。

状态码：400

表 4-818 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-819 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

删除数据库用户"gaussdb_mysql_user1"的数据库权限。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/a23fb62bd61e4e9e9636fd2225f395bein07/db-users/privilege
```

```
{
  "users": [ {
    "name": "gaussdb_mysql_user1",
    "host": "127.0.0.1",
    "databases": [ "test" ]
  } ]
}
```

响应示例

状态码: 202

Success.

```
{
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除数据库用户"gaussdb_mysql_user1"的数据库权限。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteDatabasePermissionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
    }
}
```

```
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

DeleteDatabasePermissionRequest request = new DeleteDatabasePermissionRequest();
request.withInstanceId("{instance_id}");
DeleteDatabasePermissionRequestBody body = new DeleteDatabasePermissionRequestBody();
List<String> listUsersDatabases = new ArrayList<>();
listUsersDatabases.add("test");
List<DeleteDatabasePermission> listbodyUsers = new ArrayList<>();
listbodyUsers.add(
    new DeleteDatabasePermission()
        .withName("gaussdb_mysql_user1")
        .withHost("127.0.0.1")
        .withDatabases(listUsersDatabases)
);
body.withUsers(listbodyUsers);
request.withBody(body);
try {
    DeleteDatabasePermissionResponse response = client.deleteDatabasePermission(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

删除数据库用户"gaussdb_mysql_user1"的数据库权限。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```

```
.build()

try:
    request = DeleteDatabasePermissionRequest()
    request.instance_id = "{instance_id}"
    listDatabasesUsers = [
        "test"
    ]
    listUsersbody = [
        DeleteDatabasePermission(
            name="gaussdb_mysql_user1",
            host="127.0.0.1",
            databases=listDatabasesUsers
        )
    ]
    request.body = DeleteDatabasePermissionRequestBody(
        users=listUsersbody
    )
    response = client.delete_database_permission(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

删除数据库用户"gaussdb_mysql_user1"的数据库权限。

```
package main

import (
    "fmt"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3"
    "github.com/ HuaweiCloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3/model"
    region "github.com/ huaweicloud/ huaweicloud-sdk-go-v3/services/ gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteDatabasePermissionRequest{}
    request.InstanceId = "{instance_id}"
    var listDatabasesUsers = []string{
        "test",
    }
    var listUsersbody = []model.DeleteDatabasePermission{
        {
```



```
Name: "gaussdb_mysql_user1",
Host: "127.0.0.1",
Databases: listDatabasesUsers,
},
}
request.Body = &model.DeleteDatabasePermissionRequestBody{
Users: listUsersbody,
}
response, err := client.DeleteDatabasePermission(request)
if err == nil {
fmt.Printf("%+v\n", response)
} else {
fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.11 数据库管理

4.11.1 查询数据库可用字符集

功能介绍

查询云数据库 TaurusDB实例数据库可用字符集。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/databases/charsets

表 4-820 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-821 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-822 响应 Body 参数

参数	参数类型	描述
charsets	Array of strings	数据库字符集列表

状态码：400

表 4-823 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-824 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询数据库可用字符集。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/a23fb62bd61e4e9e9636fd2225f395bein07/databases/charsets
```

响应示例

状态码：200

Success.

```
{
  "charsets": [ "utf8mb4", "gbk" ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListGaussMySQLDatabaseCharsetsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    }
}
```

```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListGaussMySqlDatabaseCharsetsRequest request = new ListGaussMySqlDatabaseCharsetsRequest();
request.withInstanceId("{instance_id}");
try {
    ListGaussMySqlDatabaseCharsetsResponse response =
client.listGaussMySqlDatabaseCharsets(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListGaussMySqlDatabaseCharsetsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_gauss_my_sql_database_charsets(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGaussMySQLDatabaseCharsetsRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListGaussMySQLDatabaseCharsets(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.11.2 创建数据库

功能介绍

创建云数据库TaurusDB实例数据库。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/databases

表 4-825 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-826 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-827 请求 Body 参数

参数	是否必选	参数类型	描述
databases	是	Array of CreateGaussMySqlDatabase objects	数据库信息列表, 列表最大长度为50。

表 4-828 CreateGaussMySqlDatabase

参数	是否必选	参数类型	描述
name	是	String	数据库名称, 数据库名称长度可在1~64个字符之间, 由字母、数字、下划线、中划线组成, 中划线的累计总长度小于等于10个字符, 且不能包含其他特殊字符。
character_set	是	String	数据库使用的字符集名称, 如 utf8mb4、gbk。
comment	否	String	数据库备注, 长度不能超过512个字符, 不能包含回车和特殊字符!<"='>&。
users	否	Array of GaussMySqlDatabaseUser objects	数据库用户列表, 即创建数据库时同步授权给列表中的用户, 列表最大长度为50。列表可以为空, 即创建数据库时不授予其权限到数据库用户, 在需要给该数据库授权某数据库用户时, 调用 数据库用户授权 接口即可。

表 4-829 GaussMySqlDatabaseUser

参数	是否必选	参数类型	描述
name	是	String	数据库用户名。
host	是	String	主机地址。
readonly	是	Boolean	是否为只读权限: <ul style="list-style-type: none">• true: 表示只读。• false: 表示可读写。

响应参数

状态码: 201

表 4-830 响应 Body 参数

参数	参数类型	描述
job_id	String	创建数据库的任务ID。

状态码: 400

表 4-831 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-832 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建数据库，字符集为utf8mb4，读写权限。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/databases
```

```
{  
  "databases": [ {  
    "name": "test",  
    "character_set": "utf8mb4",  
    "comment": "database_comment",  
    "users": [ {  
      "name": "gaussdb_mysql_user1",  
      "host": "127.0.0.1",  
      "readonly": false  
    } ]  
  } ]  
}
```

响应示例

状态码: 201

Success.


```
{
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建数据库，字符集为utf8mb4，读写权限。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateGaussMySQLDatabaseSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateGaussMySQLDatabaseRequest request = new CreateGaussMySQLDatabaseRequest();
        request.withInstanceId("{instance_id}");
        CreateGaussMySQLDatabaseRequestBody body = new CreateGaussMySQLDatabaseRequestBody();
        List<GaussMySQLDatabaseUser> listDatabasesUsers = new ArrayList<>();
        listDatabasesUsers.add(
            new GaussMySQLDatabaseUser()
                .withName("gaussdb_mysql_user1")
                .withHost("127.0.0.1")
                .withReadOnly(false)
        );
        List<CreateGaussMySQLDatabase> listbodyDatabases = new ArrayList<>();
        listbodyDatabases.add(
            new CreateGaussMySQLDatabase()
                .withName("test")
                .withComment("database_comment")
                .withCharacterSet("utf8mb4")
                .withUsers(listDatabasesUsers)
        );
        body.withDatabases(listbodyDatabases);
        request.withBody(body);
```

```
try {
    CreateGaussMySqlDatabaseResponse response = client.createGaussMySqlDatabase(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

创建数据库，字符集为utf8mb4，读写权限。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateGaussMySqlDatabaseRequest()
        request.instance_id = "{instance_id}"
        listUsersDatabases = [
            GaussMySqlDatabaseUser(
                name="gaussdb_mysql_user1",
                host="127.0.0.1",
                readonly=False
            )
        ]
        listDatabasesbody = [
            CreateGaussMySqlDatabase(
                name="test",
                comment="database_comment",
                character_set="utf8mb4",
                users=listUsersDatabases
            )
        ]
        request.body = CreateGaussMySqlDatabaseRequestBody(
            databases=listDatabasesbody
        )
        response = client.create_gauss_my_sql_database(request)
        print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

创建数据库，字符集为utf8mb4，读写权限。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateGaussMySQLDatabaseRequest{}
    request.InstanceId = "{instance_id}"
    var listUsersDatabases = []model.GaussMySQLDatabaseUser{
        {
            Name: "gaussdb_mysql_user1",
            Host: "127.0.0.1",
            ReadOnly: false,
        },
    },
    commentDatabases := "database_comment"
    var listDatabasesbody = []model.CreateGaussMySQLDatabase{
        {
            Name: "test",
            Comment: &commentDatabases,
            CharacterSet: "utf8mb4",
            Users: &listUsersDatabases,
        },
    },
    }
    request.Body = &model.CreateGaussMySQLDatabaseRequestBody{
        Databases: listDatabasesbody,
    }
    response, err := client.CreateGaussMySQLDatabase(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

```
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.11.3 查询数据库列表

功能介绍

查询 TaurusDB实例数据库。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/databases

表 4-833 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	<p>参数解释: 租户在某一Region下的project ID。 获取方法请参见获取项目ID。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 只能由英文字母、数字组成，且长度为32个字符。</p> <p>默认值: 不涉及。</p>
instance_id	是	String	<p>参数解释: 实例ID，此参数是实例的唯一标识。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 只能由英文字母、数字组成，后缀为in07，长度为36个字符。</p> <p>默认取值: 不涉及。</p>

表 4-834 Query 参数

参数	是否必选	参数类型	描述
offset	否	Integer	<p>参数解释: 索引位置，偏移量。从第一条数据偏移offset条数据后开始查询。</p> <p>约束限制: 必须为整数，不能为负数。</p> <p>取值范围: ≥0</p> <p>默认取值: 0</p>

参数	是否必选	参数类型	描述
limit	否	Integer	参数解释: 查询记录数。 约束限制: 必须为整数, 不能为负数。 取值范围: 1-100 默认取值: 100
name	否	String	参数解释: 数据库名称。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: 不涉及。
charset	否	String	参数解释: 数据库使用的字符集。 获取方法参见 查询数据库可用字符集 。 约束限制: 不涉及。 取值范围: 不涉及。 默认取值: 不涉及。

请求参数

表 4-835 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释: 用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">en-uszh-cn 默认值: en-us。

响应参数

状态码: 200

表 4-836 响应 Body 参数

参数	参数类型	描述
databases	Array of ListGaussMySQLDatabaseInfo objects	参数解释: 数据库信息列表。

参数	参数类型	描述
total_count	Integer	参数解释: 数据库总数。 取值范围: ≥0

表 4-837 ListGaussMysqlDatabaseInfo

参数	参数类型	描述
name	String	参数解释: 数据库名称。 取值范围: 不涉及
charset	String	参数解释: 数据库使用的字符集。 取值范围: 不涉及
comment	String	参数解释: 数据库备注。 取值范围: 不涉及。
users	Array of GaussMySQLDatabaseInfo objects	参数解释: 已授权数据库用户列表。

表 4-838 GaussMySQLDatabaseInfo

参数	参数类型	描述
name	String	参数解释: 数据库用户名。 取值范围: 不涉及。
host	String	参数解释: 主机地址。 取值范围: 不涉及。

参数	参数类型	描述
readonly	Boolean	参数解释: 是否为只读权限。 取值范围: <ul style="list-style-type: none">• true: 表示只读。• false: 表示可读写。

状态码: 400

表 4-839 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-840 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询数据库列表。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/databases?offset=0&limit=100&charset=utf8mb4&name=test
```

响应示例

状态码: 200

Success.

```
{  
  "databases": [{  
    "name": "test",  
    "charset": "utf8mb4",  
    "comment": "database_comment",  
    "users": [{  
      "name": "gaussdb_mysql_user1",  
      "host": "127.0.0.1",  
      "readonly": false  
    }]  
  }]  
}
```

```
    } ],  
    "total_count" : 1  
  }  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListGaussMySQLDatabaseSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListGaussMySQLDatabaseRequest request = new ListGaussMySQLDatabaseRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ListGaussMySQLDatabaseResponse response = client.listGaussMySQLDatabase(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrMsg());  
        }  
    }  
}
```

Python

```
# coding: utf-8  
import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListGaussMySQLDatabaseRequest()
        request.instance_id = "{instance_id}"
        response = client.list_gauss_my_sql_database(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListGaussMySQLDatabaseRequest{}
    request.InstanceId = "{instance_id}"
```

```
response, err := client.ListGaussMySqlDatabase(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.11.4 删除数据库

功能介绍

删除云数据库 TaurusDB实例数据库。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/databases

表 4-841 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-842 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-843 请求 Body 参数

参数	是否必选	参数类型	描述
databases	是	Array of strings	准备删除的数据库列表，列表最大长度为50。

响应参数

状态码：202

表 4-844 响应 Body 参数

参数	参数类型	描述
job_id	String	删除数据库的任务ID。

状态码：400

表 4-845 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-846 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除数据库。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/databases  
  
{  
  "databases": [ "test" ]  
}
```

响应示例

状态码：202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除数据库。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class DeleteGaussMySQLDatabaseSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running
```

```
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteGaussMySQLDatabaseRequest request = new DeleteGaussMySQLDatabaseRequest();
request.withInstanceId("{instance_id}");
DeleteGaussMySQLDatabaseRequestBody body = new DeleteGaussMySQLDatabaseRequestBody();
List<String> listbodyDatabases = new ArrayList<>();
listbodyDatabases.add("test");
body.withDatabases(listbodyDatabases);
request.withBody(body);
try {
    DeleteGaussMySQLDatabaseResponse response = client.deleteGaussMySQLDatabase(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

删除数据库。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteGaussMySQLDatabaseRequest()
```

```
request.instance_id = "{instance_id}"
listDatabasesbody = [
    "test"
]
request.body = DeleteGaussMySQLDatabaseRequestBody(
    databases=listDatabasesbody
)
response = client.delete_gauss_my_sql_database(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

删除数据库。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteGaussMySQLDatabaseRequest{}
    request.InstanceId = "{instance_id}"
    var listDatabasesbody = []string{
        "test",
    }
    request.Body = &model.DeleteGaussMySQLDatabaseRequestBody{
        Databases: listDatabasesbody,
    }
    response, err := client.DeleteGaussMySQLDatabase(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```


更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.11.5 修改数据库备注

功能介绍

修改云数据库TaurusDB实例数据库备注。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/databases/comment

表 4-847 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-848 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-849 请求 Body 参数

参数	是否必选	参数类型	描述
databases	是	Array of UpdateDatabaseComment objects	准备修改备注的数据库列表，列表最大长度为50。

表 4-850 UpdateDatabaseComment

参数	是否必选	参数类型	描述
name	是	String	数据库名称。
comment	是	String	数据库备注,长度不能超过512个字符，不能包含回车和特殊字符!<"='>&。

响应参数

状态码：202

表 4-851 响应 Body 参数

参数	参数类型	描述
job_id	String	修改数据库备注的任务ID。

状态码：400

表 4-852 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-853 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改数据库备注。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
a23fb62bd61e4e9e9636fd2225f395bein07/databases/comment
```

```
{  
  "databases": [{  
    "name": "gaussdb_mysql_user1",  
    "comment": "first_database"  
  }]  
}
```

响应示例

状态码：202

Success.

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改数据库备注。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;
```

```
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class UpdateGaussMySQLDatabaseCommentSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpdateGaussMySQLDatabaseCommentRequest request = new
        UpdateGaussMySQLDatabaseCommentRequest();
        request.withInstanceId("{instance_id}");
        UpdateDatabaseCommentRequest body = new UpdateDatabaseCommentRequest();
        List<UpdateDatabaseComment> listbodyDatabases = new ArrayList<>();
        listbodyDatabases.add(
            new UpdateDatabaseComment()
                .withName("gaussdb_mysql_user1")
                .withComment("first_database")
        );
        body.withDatabases(listbodyDatabases);
        request.withBody(body);
        try {
            UpdateGaussMySQLDatabaseCommentResponse response =
            client.updateGaussMySQLDatabaseComment(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

修改数据库备注。

```
# coding: utf-8

import os
```

```
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateGaussMySQLDatabaseCommentRequest()
        request.instance_id = "{instance_id}"
        listDatabasesbody = [
            UpdateDatabaseComment(
                name="gaussdb_mysql_user1",
                comment="first_database"
            )
        ]
        request.body = UpdateDatabaseCommentRequest(
            databases=listDatabasesbody
        )
        response = client.update_gauss_my_sql_database_comment(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

修改数据库备注。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
```

```
WithProjectId(projectId).
Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateGaussMySQLDatabaseCommentRequest{}
request.InstanceId = "{instance_id}"
var listDatabasesbody = []model.UpdateDatabaseComment{
    {
        Name: "gaussdb_mysql_user1",
        Comment: "first_database",
    },
}
request.Body = &model.UpdateDatabaseCommentRequest{
    Databases: listDatabasesbody,
}
response, err := client.UpdateGaussMySQLDatabaseComment(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.12 流量管理

4.12.1 查询 SQL 限流开关状态

功能介绍

查询SQL限流开关状态。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/sql-filter/switch

表 4-854 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-855 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-856 响应 Body 参数

参数	参数类型	描述
switch_status	String	SQL限流开关状态。 取值： <ul style="list-style-type: none">ON: 已开启。OFF: 已关闭。

状态码: 400

表 4-857 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-858 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询SQL限流开关状态。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
```

响应示例

状态码: 200

Success.

```
{  
  "switch_status": "ON"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowSqlFilterControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowSqlFilterControlRequest request = new ShowSqlFilterControlRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowSqlFilterControlResponse response = client.showSqlFilterControl(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowSqlFilterControlRequest()
    request.instance_id = "{instance_id}"
    response = client.show_sql_filter_control(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/ HuaweiCloud/ HuaweiCloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowSqlFilterControlRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowSqlFilterControl(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.12.2 开启或者关闭 SQL 限流

功能介绍

开启或者关闭SQL限流。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/sql-filter/switch

表 4-859 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-860 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-861 请求 Body 参数

参数	是否必选	参数类型	描述
switch_status	是	String	SQL限流开关状态。 取值： <ul style="list-style-type: none">ON：表示开启。OFF：表示关闭。

响应参数

状态码：200

表 4-862 响应 Body 参数

参数	参数类型	描述
job_id	String	开启/关闭SQL限流任务ID。

状态码：400

表 4-863 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-864 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启SQL限流。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
```

```
{  
  "switch_status": "ON"  
}
```

- 关闭SQL限流。

```
POST https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/switch
```

```
{  
  "switch_status": "OFF"  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id": "aef6a470-fb63-4d5b-b644-12ead7e019b3"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启SQL限流。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

```
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateSqlFilterControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateSqlFilterControlRequest request = new UpdateSqlFilterControlRequest();
        request.withInstanceId("{instance_id}");
        OperateSqlFilterControlReq body = new OperateSqlFilterControlReq();
        body.withSwitchStatus("ON");
        request.withBody(body);
        try {
            UpdateSqlFilterControlResponse response = client.updateSqlFilterControl(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- 关闭SQL限流。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateSqlFilterControlSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
```

```
environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
UpdateSqlFilterControlRequest request = new UpdateSqlFilterControlRequest();
request.withInstanceId("{instance_id}");
OperateSqlFilterControlReq body = new OperateSqlFilterControlReq();
body.withSwitchStatus("OFF");
request.withBody(body);
try {
    UpdateSqlFilterControlResponse response = client.updateSqlFilterControl(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

- 开启SQL限流。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateSqlFilterControlRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateSqlFilterControlReq(
```

```
        switch_status="ON"
    )
    response = client.update_sql_filter_control(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

- 关闭SQL限流。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateSqlFilterControlRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateSqlFilterControlReq(
            switch_status="OFF"
        )
        response = client.update_sql_filter_control(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

- 开启SQL限流。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
```



```
// In this example, AK and SK are stored in environment variables for authentication. Before
running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateSqlFilterControlRequest{
    request.InstanceId = "{instance_id}"
    request.Body = &model.OperateSqlFilterControlReq{
        SwitchStatus: "ON",
    }
}
response, err := client.UpdateSqlFilterControl(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

- 关闭SQL限流。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateSqlFilterControlRequest{
        request.InstanceId = "{instance_id}"
        request.Body = &model.OperateSqlFilterControlReq{
            SwitchStatus: "OFF",
        }
    }
```

```
}  
response, err := client.UpdateSqlFilterControl(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.12.3 设置 SQL 限流规则

功能介绍

设置SQL限流规则。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/sql-filter/rules

表 4-865 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-866 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

表 4-867 请求 Body 参数

参数	是否必选	参数类型	描述
sql_filter_rules	是	Array of NodeSqlFilterRuleInfo objects	节点级别的SQL限流规则。

表 4-868 NodeSqlFilterRuleInfo

参数	是否必选	参数类型	描述
node_id	是	String	节点ID。
rules	是	Array of NodeSqlFilterRule objects	SQL限流规则。集合的sql_type值不能重复。

表 4-869 NodeSqlFilterRule

参数	是否必选	参数类型	描述
sql_type	是	String	Sql限流类型。 取值范围： <ul style="list-style-type: none">• SELECT• UPDATE• DELETE
patterns	是	Array of NodeSqlFilterRulePattern objects	SQL限流具体规则。

表 4-870 NodeSqlFilterRulePattern

参数	是否必选	参数类型	描述
pattern	是	String	SQL限流规则，由一个或多个关键字（最多为128个关键字）组成，关键字之间通过"~"分隔符分开，如select~from~t1。规则中不能包含‘\’、中英文逗号、‘~~’，不能以‘~’结尾。
max_concurrency	是	Integer	最大并发数。取值范围：非负整数。

响应参数

状态码：200

表 4-871 响应 Body 参数

参数	参数类型	描述
job_id	String	设置SQL限流规则任务ID。

状态码：400

表 4-872 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码: 500

表 4-873 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

设置SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

PUT <https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/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
  }
]
}
]
```

响应示例

状态码: 200

Success.

```
{
  "job_id": "aef6a470-fb63-4d5b-b644-12ead7e019b3"
}
```

SDK 代码示例

SDK代码示例如下。

Java

设置SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class SetSqlFilterRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SetSqlFilterRuleRequest request = new SetSqlFilterRuleRequest();
        request.withInstanceId("{instance_id}");
        OperateSqlFilterRuleReq body = new OperateSqlFilterRuleReq();
        List<NodeSqlFilterRulePattern> listRulesPatterns = new ArrayList<>();
        listRulesPatterns.add(
            new NodeSqlFilterRulePattern()
                .withPattern("delete~t3~where~id")
                .withMaxConcurrency(10)
        );
        List<NodeSqlFilterRulePattern> listRulesPatterns1 = new ArrayList<>();
        listRulesPatterns1.add(
            new NodeSqlFilterRulePattern()
                .withPattern("select~from~t3~where~id")
                .withMaxConcurrency(10)
        );
    }
}
```

```
);
List<NodeSqlFilterRule> listSqlFilterRulesRules = new ArrayList<>();
listSqlFilterRulesRules.add(
    new NodeSqlFilterRule()
        .withSqlType("SELECT")
        .withPatterns(listRulesPatterns1)
);
listSqlFilterRulesRules.add(
    new NodeSqlFilterRule()
        .withSqlType("DELETE")
        .withPatterns(listRulesPatterns)
);
List<NodeSqlFilterRulePattern> listRulesPatterns2 = new ArrayList<>();
listRulesPatterns2.add(
    new NodeSqlFilterRulePattern()
        .withPattern("update~t3~where~id")
        .withMaxConcurrency(10)
);
List<NodeSqlFilterRulePattern> listRulesPatterns3 = new ArrayList<>();
listRulesPatterns3.add(
    new NodeSqlFilterRulePattern()
        .withPattern("select~from~t1")
        .withMaxConcurrency(0)
);
listRulesPatterns3.add(
    new NodeSqlFilterRulePattern()
        .withPattern("select~from~t3~where~id")
        .withMaxConcurrency(10)
);
List<NodeSqlFilterRule> listSqlFilterRulesRules1 = new ArrayList<>();
listSqlFilterRulesRules1.add(
    new NodeSqlFilterRule()
        .withSqlType("SELECT")
        .withPatterns(listRulesPatterns3)
);
listSqlFilterRulesRules1.add(
    new NodeSqlFilterRule()
        .withSqlType("UPDATE")
        .withPatterns(listRulesPatterns2)
);
List<NodeSqlFilterRuleInfo> listbodySqlFilterRules = new ArrayList<>();
listbodySqlFilterRules.add(
    new NodeSqlFilterRuleInfo()
        .withNodeId("c01a5645eb2c4fb6a9373542f5366e50no07")
        .withRules(listSqlFilterRulesRules1)
);
listbodySqlFilterRules.add(
    new NodeSqlFilterRuleInfo()
        .withNodeId("b234a5645eb2c4jj3b9372342f5362397no07")
        .withRules(listSqlFilterRulesRules)
);
body.withSqlFilterRules(listbodySqlFilterRules);
request.withBody(body);
try {
    SetSqlFilterRuleResponse response = client.setSqlFilterRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

设置SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SetSqlFilterRuleRequest()
        request.instance_id = "{instance_id}"
        listPatternsRules = [
            NodeSqlFilterRulePattern(
                pattern="delete~t3~where~id",
                max_concurrency=10
            )
        ]
        listPatternsRules1 = [
            NodeSqlFilterRulePattern(
                pattern="select~from~t3~where~id",
                max_concurrency=10
            )
        ]
        listRulesSqlFilterRules = [
            NodeSqlFilterRule(
                sql_type="SELECT",
                patterns=listPatternsRules1
            ),
            NodeSqlFilterRule(
                sql_type="DELETE",
                patterns=listPatternsRules
            )
        ]
        listPatternsRules2 = [
            NodeSqlFilterRulePattern(
                pattern="update~t3~where~id",
                max_concurrency=10
            )
        ]
        listPatternsRules3 = [
            NodeSqlFilterRulePattern(
                pattern="select~from~t1",
                max_concurrency=0
            ),
            NodeSqlFilterRulePattern(
                pattern="select~from~t3~where~id",
                max_concurrency=10
            )
        ]
```



```
]
listRulesSqlFilterRules1 = [
    NodeSqlFilterRule(
        sql_type="SELECT",
        patterns=listPatternsRules3
    ),
    NodeSqlFilterRule(
        sql_type="UPDATE",
        patterns=listPatternsRules2
    )
]
listSqlFilterRulesbody = [
    NodeSqlFilterRuleInfo(
        node_id="c01a5645eb2c4fb6a9373542f5366e50no07",
        rules=listRulesSqlFilterRules1
    ),
    NodeSqlFilterRuleInfo(
        node_id="b234a5645eb2c4ji3b9372342f5362397no07",
        rules=listRulesSqlFilterRules
    )
]
request.body = OperateSqlFilterRuleReq(
    sql_filter_rules=listSqlFilterRulesbody
)
response = client.set_sql_filter_rule(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

设置SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.SetSqlFilterRuleRequest{
```

```
request.InstanceId = "{instance_id}"
var listPatternsRules = []model.NodeSqlFilterRulePattern{
    {
        Pattern: "delete~t3~where~id",
        MaxConcurrency: int32(10),
    },
}
var listPatternsRules1 = []model.NodeSqlFilterRulePattern{
    {
        Pattern: "select~from~t3~where~id",
        MaxConcurrency: int32(10),
    },
}
var listRulesSqlFilterRules = []model.NodeSqlFilterRule{
    {
        SqlType: "SELECT",
        Patterns: listPatternsRules1,
    },
    {
        SqlType: "DELETE",
        Patterns: listPatternsRules,
    },
}
var listPatternsRules2 = []model.NodeSqlFilterRulePattern{
    {
        Pattern: "update~t3~where~id",
        MaxConcurrency: int32(10),
    },
}
var listPatternsRules3 = []model.NodeSqlFilterRulePattern{
    {
        Pattern: "select~from~t1",
        MaxConcurrency: int32(0),
    },
    {
        Pattern: "select~from~t3~where~id",
        MaxConcurrency: int32(10),
    },
}
var listRulesSqlFilterRules1 = []model.NodeSqlFilterRule{
    {
        SqlType: "SELECT",
        Patterns: listPatternsRules3,
    },
    {
        SqlType: "UPDATE",
        Patterns: listPatternsRules2,
    },
}
var listSqlFilterRulesbody = []model.NodeSqlFilterRuleInfo{
    {
        NodeId: "c01a5645eb2c4fb6a9373542f5366e50no07",
        Rules: listRulesSqlFilterRules1,
    },
    {
        NodeId: "b234a5645eb2c4ji3b9372342f5362397no07",
        Rules: listRulesSqlFilterRules,
    },
}
request.Body = &model.OperateSqlFilterRuleReq{
    SqlFilterRules: listSqlFilterRulesbody,
}
response, err := client.SetSqlFilterRule(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.12.4 查询 SQL 限流规则

功能介绍

查询SQL限流规则。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/sql-filter/rules

表 4-874 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-875 Query 参数

参数	是否必选	参数类型	描述
node_id	是	String	节点ID。

参数	是否必选	参数类型	描述
sql_type	否	String	SQL限流类型，取值为SELECT、UPDATE、DELETE，不区分大小写；若不传则默认查询所有类型的限流规则。

请求参数

表 4-876 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-877 响应 Body 参数

参数	参数类型	描述
node_id	String	节点ID。
sql_filter_rules	Array of SqlFilterRule objects	SQL限流规则。

表 4-878 SqlFilterRule

参数	参数类型	描述
sql_type	String	SQL限流类型。 取值范围： <ul style="list-style-type: none">• SELECT• UPDATE• DELETE
patterns	Array of SqlFilterRulePattern objects	SQL限流具体规则。

表 4-879 SqlFilterRulePattern

参数	参数类型	描述
pattern	String	SQL限流规则。
max_concurrency	Integer	最大并发数。

状态码：400

表 4-880 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-881 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询SQL限流规则。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
af315b8e6aaa41799bd9a31f2de15abcin07/sql-filter/rules?  
node_id=c01a5645eb2c4fb6a9373542f5366e50no07
```

响应示例

状态码: 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  
    } ]  
  } ]  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowSqlFilterRuleSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
    }  
}
```

```
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ShowSqlFilterRuleRequest request = new ShowSqlFilterRuleRequest();
request.withInstanceId("{instance_id}");
try {
    ShowSqlFilterRuleResponse response = client.showSqlFilterRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowSqlFilterRuleRequest()
        request.instance_id = "{instance_id}"
        response = client.show_sql_filter_rule(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowSqlFilterRuleRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowSqlFilterRule(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.12.5 删除 SQL 限流规则

功能介绍

删除SQL限流规则。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/sql-filter/rules

表 4-882 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-883 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-884 请求 Body 参数

参数	是否必选	参数类型	描述
sql_filter_rules	是	Array of DeleteNodeSqlFilterRuleInfo objects	节点级别的SQL限流规则。

表 4-885 DeleteNodeSqlFilterRuleInfo

参数	是否必选	参数类型	描述
node_id	是	String	节点ID
rules	是	Array of DeleteNodeSqlFilterRule objects	SQL限流规则。

表 4-886 DeleteNodeSqlFilterRule

参数	是否必选	参数类型	描述
sql_type	是	String	Sql限流类型。 取值范围： <ul style="list-style-type: none"> • SELECT • UPDATE • DELETE
patterns	是	Array of strings	SQL限流具体规则。

响应参数

状态码：200

表 4-887 响应 Body 参数

参数	参数类型	描述
job_id	String	删除SQL限流规则任务ID。

状态码：400

表 4-888 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-889 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
DELETE https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/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": [ "udpate~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" ]
  }
]
}]
}
```

响应示例

状态码: 200

Success.

```
{
  "job_id": "aef6a470-fb63-4d5b-b644-12ead7e019b3"
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class DeleteSqlFilterRuleSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteSqlFilterRuleRequest request = new DeleteSqlFilterRuleRequest();
        request.withInstanceId("{instance_id}");
        DeleteSqlFilterRuleReq body = new DeleteSqlFilterRuleReq();
        List<String> listRulesPatterns = new ArrayList<>();
        listRulesPatterns.add("delete~t3~where~id");
        List<String> listRulesPatterns1 = new ArrayList<>();
        listRulesPatterns1.add("select~from~t1");
        listRulesPatterns1.add("select~from~t2");
        List<DeleteNodeSqlFilterRule> listSqlFilterRules = new ArrayList<>();
        listSqlFilterRules.add(
            new DeleteNodeSqlFilterRule()
                .withSqlType("SELECT")
                .withPatterns(listRulesPatterns1)
        );
        listSqlFilterRules.add(
            new DeleteNodeSqlFilterRule()
                .withSqlType("DELETE")
                .withPatterns(listRulesPatterns)
        );
        List<String> listRulesPatterns2 = new ArrayList<>();
        listRulesPatterns2.add("update~t3~where~id");
        List<String> listRulesPatterns3 = new ArrayList<>();
        listRulesPatterns3.add("select~from~t1");
        listRulesPatterns3.add("select~from~t2");
        List<DeleteNodeSqlFilterRule> listSqlFilterRules1 = new ArrayList<>();
```

```
listSqlFilterRulesRules1.add(
    new DeleteNodeSqlFilterRule()
        .withSqlType("SELECT")
        .withPatterns(listRulesPatterns3)
);
listSqlFilterRulesRules1.add(
    new DeleteNodeSqlFilterRule()
        .withSqlType("UPDATE")
        .withPatterns(listRulesPatterns2)
);
List<DeleteNodeSqlFilterRuleInfo> listbodySqlFilterRules = new ArrayList<>();
listbodySqlFilterRules.add(
    new DeleteNodeSqlFilterRuleInfo()
        .withNodeId("c01a5645eb2c4fb6a9373542f5366e50no07")
        .withRules(listSqlFilterRulesRules1)
);
listbodySqlFilterRules.add(
    new DeleteNodeSqlFilterRuleInfo()
        .withNodeId("b234a5645eb2c4ji3b9372342f5362397no07")
        .withRules(listSqlFilterRulesRules)
);
body.withSqlFilterRules(listbodySqlFilterRules);
request.withBody(body);
try {
    DeleteSqlFilterRuleResponse response = client.deleteSqlFilterRule(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

删除SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = DeleteSqlFilterRuleRequest()
    request.instance_id = "{instance_id}"
    listPatternsRules = [
        "delete~t3~where~id"
    ]
    listPatternsRules1 = [
        "select~from~t1",
        "select~from~t2"
    ]
    listRulesSqlFilterRules = [
        DeleteNodeSqlFilterRule(
            sql_type="SELECT",
            patterns=listPatternsRules1
        ),
        DeleteNodeSqlFilterRule(
            sql_type="DELETE",
            patterns=listPatternsRules
        )
    ]
    listPatternsRules2 = [
        "update~t3~where~id"
    ]
    listPatternsRules3 = [
        "select~from~t1",
        "select~from~t2"
    ]
    listRulesSqlFilterRules1 = [
        DeleteNodeSqlFilterRule(
            sql_type="SELECT",
            patterns=listPatternsRules3
        ),
        DeleteNodeSqlFilterRule(
            sql_type="UPDATE",
            patterns=listPatternsRules2
        )
    ]
    listSqlFilterRulesbody = [
        DeleteNodeSqlFilterRuleInfo(
            node_id="c01a5645eb2c4fb6a9373542f5366e50no07",
            rules=listRulesSqlFilterRules1
        ),
        DeleteNodeSqlFilterRuleInfo(
            node_id="b234a5645eb2c4jj3b9372342f5362397no07",
            rules=listRulesSqlFilterRules
        )
    ]
    request.body = DeleteSqlFilterRuleReq(
        sql_filter_rules=listSqlFilterRulesbody
    )
    response = client.delete_sql_filter_rule(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

删除SQL限流规则，限流类型为SELECT、UPDATE、DELETE。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteSqlFilterRuleRequest{}
    request.InstanceId = "{instance_id}"
    var listPatternsRules = []string{
        "delete~t3~where~id",
    }
    var listPatternsRules1 = []string{
        "select~from~t1",
        "select~from~t2",
    }
    var listRulesSqlFilterRules = []model.DeleteNodeSqlFilterRule{
        {
            SqlType: "SELECT",
            Patterns: listPatternsRules1,
        },
        {
            SqlType: "DELETE",
            Patterns: listPatternsRules,
        },
    }
    var listPatternsRules2 = []string{
        "update~t3~where~id",
    }
    var listPatternsRules3 = []string{
        "select~from~t1",
        "select~from~t2",
    }
    var listRulesSqlFilterRules1 = []model.DeleteNodeSqlFilterRule{
        {
            SqlType: "SELECT",
            Patterns: listPatternsRules3,
        },
        {
            SqlType: "UPDATE",
            Patterns: listPatternsRules2,
        },
    }
    var listSqlFilterRulesbody = []model.DeleteNodeSqlFilterRuleInfo{
        {
            NodeId: "c01a5645eb2c4fb6a9373542f5366e50no07",
            Rules: listRulesSqlFilterRules1,
        },
        {
            NodeId: "b234a5645eb2c4ji3b9372342f5362397no07",
            Rules: listRulesSqlFilterRules,
        },
    }
}
```

```
    },  
  }  
  request.Body = &model.DeleteSqlFilterRuleReq{  
    SqlFilterRules: listSqlFilterRulesbody,  
  }  
  response, err := client.DeleteSqlFilterRule(request)  
  if err == nil {  
    fmt.Printf("%+v\n", response)  
  } else {  
    fmt.Println(err)  
  }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13 任务中心

4.13.1 获取指定 ID 的任务信息

功能介绍

获取TaurusDB任务中心指定ID的任务信息。

接口约束

- 该接口只可查询任务中心一个月内的异步任务。
- job生成后，通常需要数秒之后才能查询到job ID。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/jobs

表 4-890 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成,且长度为32个字符。 默认值: 不涉及。

表 4-891 Query 参数

参数	是否必选	参数类型	描述
id	是	String	参数解释: 任务ID。 获取方法参见 获取即时任务列表 和 获取定时任务列表 。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。

请求参数

表 4-892 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	<p>参数解释: 用户Token。 通过调用IAM服务获取用户Token接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>
X-Language	否	String	<p>参数解释: 请求语言类型。</p> <p>约束限制: 不涉及。</p> <p>取值范围:</p> <ul style="list-style-type: none"> en-us zh-cn <p>默认值: en-us。</p>

响应参数

状态码：200

表 4-893 响应 Body 参数

参数	参数类型	描述
job	GetJobInfoDetail object	任务信息。

表 4-894 GetJobInfoDetail

参数	参数类型	描述
id	String	参数解释: 任务ID。 取值范围: 与入参保持一致。
name	String	参数解释: 任务名称。 取值范围: 不涉及。
status	String	参数解释: 任务执行状态。 取值范围: <ul style="list-style-type: none">• Pending: 表示延时任务, 未执行。• Running: 表示任务正在执行。• Completed: 表示任务执行成功。• Failed: 表示任务执行失败。
created	String	参数解释: 创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
ended	String	参数解释: 结束时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
process	String	参数解释: 任务执行进度。 取值范围: 执行中状态才返回执行进度, 例如60%, 否则返回""。
instance	GetJobInstanceInfoDetail object	参数解释: 指定ID任务的实例信息。

参数	参数类型	描述
entities	Object	参数解释: 根据不同的任务, 显示不同的内容。
fail_reason	String	参数解释: 任务执行失败时的错误信息。 取值范围: 不涉及。

表 4-895 GetJobInstanceInfoDetail

参数	参数类型	描述
id	String	参数解释: 实例ID, 此参数是实例的唯一标识。 取值范围: 只能由英文字母、数字组成, 后缀为in07, 长度为36个字符。
name	String	参数解释: 实例名称。 取值范围: 最小为4个字符, 最大为64个字符且不超过64个字节(注意: 一个中文字符占用3个字节), 必须以字母或中文开头, 区分大小写, 可以包含字母、数字、中划线、下划线或中文, 不能包含其他特殊字符。

状态码: 400

表 4-896 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-897 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取指定ID的任务信息。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/jobs?id=f9959f52-aa4d-43f7-be74-44b6fc20b239
```

响应示例

状态码: 200

Success.

```
{
  "job" : {
    "id" : "f9959f52-aa4d-43f7-be74-44b6fc20b239",
    "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" ]
    }
  }
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
```

```
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowGaussMySqlJobInfoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ShowGaussMySqlJobInfoRequest request = new ShowGaussMySqlJobInfoRequest();
        try {
            ShowGaussMySqlJobInfoResponse response = client.showGaussMySqlJobInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = ShowGaussMySqlJobInfoRequest()
    response = client.show_gauss_my_sql_job_info(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowGaussMySqlJobInfoRequest{}
    response, err := client.ShowGaussMySqlJobInfo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13.2 获取即时任务列表

功能介绍

获取即时任务列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/immediate-jobs

表 4-898 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-899 Query 参数

参数	是否必选	参数类型	描述
status	否	String	任务执行状态。 取值： <ul style="list-style-type: none">Running：表示任务正在执行。Completed：表示任务执行成功。Failed：表示任务执行失败。Pending：表示任务未执行。

参数	是否必选	参数类型	描述
job_name	否	String	<p>任务名称。取值有：</p> <ul style="list-style-type: none"> • "CreateGaussDBforMySQLInstance"表示创建实例。 • "RestoreGaussDBforMySQLNewInstance"表示恢复新实例。 • "AddGaussDBforMySQLNodes"表示添加节点。 • "DeleteGaussDBforMySQLNode"表示删除节点。 • "RebootGaussDBforMySQLInstance"表示重启实例。 • "ModifyGaussDBforMySQLPort"表示修改实例端口。 • "ModifyGaussDBforMySQLSecurityGroup"表示修改实例安全组。 • "ResizeGaussDBforMySQLFlavor"表示实例规格变更。 • "SwitchoverGaussDBforMySQLMasterNode"表示只读升主。 • "GaussDBforMySQLBindEIP"表示绑定弹性公网IP地址。 • "GaussDBforMySQLUnbindEIP"表示解绑弹性公网IP地址。 • "RenameGaussDBforMySQLInstance"表示修改实例名称。 • "DeleteGaussDBforMySQLInstance"表示删除实例集群。 • "UpgradeGaussDBforMySQLDatabaseVersion"表示版本升级。 • "EnlargeGaussDBforMySQLProxy"表示实例的数据库代理节点扩容。 • "OpenGaussDBforMySQLProxy"表示开启实例的数据库代理。

参数	是否必选	参数类型	描述
			<ul style="list-style-type: none"> "CloseGaussDBforMySQLProxy"表示关闭实例的数据库代理。 "GaussdbforMySQLModifyProxyIp"表示修改数据库代理ip。 "ScaleGaussDBforMySQLProxy"表示实例的数据库代理节点规格变更。 "GaussDBforMySQLModifyInstanceMetricExtend"表示实例秒级监控。 "GaussDBforMySQLModifyInstanceDataVip"表示修改实例数据Vip。 "GaussDBforMySQLSwitchSSL"表示切换实例SSL开关。 "GaussDBforMySQLModifyProxyConsist"表示修改代理一致性。 "GaussDBforMySQLModifyProxyWeight"表示修改代理权重。
job_id	否	String	任务ID。
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为1，必须为数字，不能为负数。
limit	否	String	查询记录数。默认为10，取值为10、20、50。
start_time	否	String	起始时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
end_time	否	String	结束时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。

请求参数

表 4-900 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-901 响应 Body 参数

参数	参数类型	描述
jobs	Array of TaskDetailInfo objects	任务详情。
total_count	Integer	任务总数。

表 4-902 TaskDetailInfo

参数	参数类型	描述
instance_id	String	实例ID，严格匹配UUID规则。
instance_name	String	实例名称。
instance_status	String	实例状态。 取值范围： <ul style="list-style-type: none">createfail：表示实例创建失败。creating：表示实例创建中。normal：表示实例正常。abnormal：表示实例异常。deleted：表示实例已删除。

参数	参数类型	描述
job_id	String	任务ID。
order_id	String	订单ID。

参数	参数类型	描述
job_name	String	<p>任务名称。</p> <p>取值范围有：</p> <ul style="list-style-type: none">• CreateGaussDBforMySQLInstance：表示创建实例。• RestoreGaussDBforMySQLNewInstance：表示恢复新实例。• AddGaussDBforMySQLNodes：表示添加节点。• DeleteGaussDBforMySQLNode：表示删除节点。• RebootGaussDBforMySQLInstance：表示重启实例。• ModifyGaussDBforMySQLPort：表示修改实例端口。• ModifyGaussDBforMySQLSecurityGroup：表示修改实例安全组。• ResizeGaussDBforMySQLFlavor：表示实例规格变更。• SwitchoverGaussDBforMySQLMasterNode：表示只读升主。• GaussDBforMySQLBindEIP：表示绑定弹性公网IP地址。• GaussDBforMySQLUnbindEIP：表示解绑弹性公网IP地址。• RenameGaussDBforMySQLInstance：表示修改实例名称。• DeleteGaussDBforMySQLInstance：表示删除实例集群。• UpgradeGaussDBforMySQLDatabaseVersion：表示版本升级。• EnlargeGaussDBforMySQLProxy：表示实例的数据库代理节点扩容。• OpenGaussDBforMySQLProxy：表示开启实例的数据库代理。• CloseGaussDBforMySQLProxy：表示关闭实例的数据库代理。• GaussdbforMySQLModifyProxyIp：表示修改数据库读写分离地址。• ScaleGaussDBforMySQLProxy：表示实例的数据库代理节点规格变更。• GaussDBforMySQLModifyInstanceMetricExtend：表示实例秒级监控。

参数	参数类型	描述
		<ul style="list-style-type: none">GaussDBforMySQLModifyInstanceDataVip: 表示修改实例数据浮动IP。GaussDBforMySQLSwitchSSL: 表示切换实例SSL开关。GaussDBforMySQLModifyProxyConsist: 表示修改代理一致性。GaussDBforMySQLModifyProxyWeight: 表示修改代理权重。
status	String	任务执行状态。 取值范围: <ul style="list-style-type: none">Pending: 表示延时任务, 未执行。Running: 表示任务正在执行。Completed: 表示任务执行成功。Failed: 表示任务执行失败。
process	String	任务进度。
created_time	String	任务创建时间。格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
ended_time	String	任务结束时间。格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
fail_reason	String	任务失败原因。

状态码: 400

表 4-903 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-904 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取即时任务列表。

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/immediate-jobs
```

响应示例

状态码：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": null
  }, {
    "instance_id": "ede953923f06448d9be8686ef0c1378ein07",
    "instance_name": "gauss-1234",
    "instance_status": "deleted",
    "job_id": "335ab2a4-a038-4fa9-a62c-49dd84015011",
    "order_id": "",
    "job_name": "ResizeGaussDBforMySQLFlavor",
    "status": "Failed",
    "process": "",
    "created_time": "2018-08-06T11:25:23+0000",
    "ended_time": "2018-08-06T11:31:12+0000",
    "fail_reason": "Single task exception."
  } ],
  "total_count": 2
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
```

```
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListImmediateJobsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListImmediateJobsRequest request = new ListImmediateJobsRequest();
        try {
            ListImmediateJobsResponse response = client.listImmediateJobs(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
```



```
.build()

try:
    request = ListImmediateJobsRequest()
    response = client.list_immediate_jobs(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListImmediateJobsRequest{}
    response, err := client.ListImmediateJobs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13.3 获取定时任务列表

功能介绍

获取定时任务列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/scheduled-jobs

表 4-905 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-906 Query 参数

参数	是否必选	参数类型	描述
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为1，必须为数字，不能为负数。
limit	否	String	查询记录数。默认为10

参数	是否必选	参数类型	描述
status	否	String	任务执行状态。 取值： <ul style="list-style-type: none">Running：表示任务正在执行。Completed：表示任务执行成功。Failed：表示任务执行失败。Pending：表示任务未执行。
start_time	否	String	起始时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
end_time	否	String	结束时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
job_id	否	String	任务ID。
job_name	否	String	任务调度类型。

请求参数

表 4-907 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-908 响应 Body 参数

参数	参数类型	描述
schedules	Array of ScheduleTask objects	任务详情
total_count	Integer	记录总数。

表 4-909 ScheduleTask

参数	参数类型	描述
job_id	String	任务ID。
instance_id	String	实例ID, 严格匹配UUID规则。
instance_name	String	实例名称。
instance_status	String	实例状态。 取值范围: <ul style="list-style-type: none">• createfail: 表示实例创建失败。• creating: 表示实例创建中。• normal: 表示实例正常。• abnormal: 表示实例异常。• deleted: 表示实例已删除。
project_id	String	租户在某一Region下的project ID。

参数	参数类型	描述
job_name	String	<p>任务名称。</p> <p>取值范围有：</p> <ul style="list-style-type: none">• CreateGaussDBforMySQLInstance：表示创建实例。• RestoreGaussDBforMySQLNewInstance：表示恢复新实例。• AddGaussDBforMySQLNodes：表示添加节点。• DeleteGaussDBforMySQLNode：表示删除节点。• RebootGaussDBforMySQLInstance：表示重启实例。• ModifyGaussDBforMySQLPort：表示修改实例端口。• ModifyGaussDBforMySQLSecurityGroup：表示修改实例安全组。• ResizeGaussDBforMySQLFlavor：表示实例规格变更。• SwitchoverGaussDBforMySQLMasterNode：表示只读升主。• GaussDBforMySQLBindEIP：表示绑定弹性公网IP地址。• GaussDBforMySQLUnbindEIP：表示解绑弹性公网IP地址。• RenameGaussDBforMySQLInstance：表示修改实例名称。• DeleteGaussDBforMySQLInstance：表示删除实例集群。• UpgradeGaussDBforMySQLDatabaseVersion：表示版本升级。• EnlargeGaussDBforMySQLProxy：表示实例的数据库代理节点扩容。• OpenGaussDBforMySQLProxy：表示开启实例的数据库代理。• CloseGaussDBforMySQLProxy：表示关闭实例的数据库代理。• GaussdbforMySQLModifyProxyIp：表示修改数据库读写分离地址。• ScaleGaussDBforMySQLProxy：表示实例的数据库代理节点规格变更。• GaussDBforMySQLModifyInstanceMetricExtend：表示实例秒级监控。

参数	参数类型	描述
		<ul style="list-style-type: none"> GaussDBforMySQLModifyInstanceDataVip: 表示修改实例数据浮动IP。 GaussDBforMySQLSwitchSSL: 表示切换实例SSL开关。 GaussDBforMySQLModifyProxyConsist: 表示修改代理一致性。 GaussDBforMySQLModifyProxyWeight: 表示修改代理权重。
create_time	String	任务创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
start_time	String	任务开始时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
end_time	String	任务结束时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
job_status	String	任务执行状态。 取值范围: <ul style="list-style-type: none"> Pending: 表示延时任务, 未执行。 Running: 表示任务正在执行。 Completed: 表示任务执行成功。 Failed: 表示任务执行失败。
datastore_type	String	数据库类型。
target_config	Object	实例配置相关信息, 比如规格等。

状态码: 400

表 4-910 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-911 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

获取定时任务列表。

```
GET https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/scheduled-jobs?offset=1&limit=10
```

响应示例

状态码：200

Success.

```
{
  "schedules": [ {
    "job_id": "56d3c1138dcf4f1da73b0170700c78d0",
    "instance_id": "79bc540dd4d6432784894a981dfacfcin07",
    "instance_name": "gauss-f821",
    "instance_status": "BUILD",
    "project_id": "053f533ead80d5102f0cc012e8d468a4",
    "job_name": "VERSION_UPGRADE",
    "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
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListScheduleJobsSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    ListScheduleJobsRequest request = new ListScheduleJobsRequest();
    try {
        ListScheduleJobsResponse response = client.listScheduleJobs(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListScheduleJobsRequest()
        response = client.list_schedule_jobs(request)
        print(response)
    except exceptions.ClientRequestException as e:
```



```
print(e.status_code)
print(e.request_id)
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListScheduleJobsRequest{}
    response, err := client.ListScheduleJobs(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13.4 取消定时任务

功能介绍

取消定时任务。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/scheduled-jobs

表 4-912 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-913 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-914 请求 Body 参数

参数	是否必选	参数类型	描述
job_ids	是	Array of strings	任务ID。

响应参数

状态码：200

表 4-915 响应 Body 参数

参数	参数类型	描述
job_ids	Array of strings	任务ID，表示成功取消定时调度任务的ID。

状态码：400

表 4-916 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-917 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

取消定时任务。

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/scheduled-jobs
{
  "job_ids": [ "56d3c1138dcf4f1da73b0170700c78d0" ]
}
```

响应示例

状态码：200

Success.

```
{
  "job_ids" : [ "56d3c1138dcf4f1da73b0170700c78d0" ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

取消定时任务。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CancelScheduleTaskSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CancelScheduleTaskRequest request = new CancelScheduleTaskRequest();
        CancelScheduleTask body = new CancelScheduleTask();
        List<String> listbodyJobIds = new ArrayList<>();
        listbodyJobIds.add("56d3c1138dcf4f1da73b0170700c78d0");
        body.withJobIds(listbodyJobIds);
        request.withBody(body);
        try {
            CancelScheduleTaskResponse response = client.cancelScheduleTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
        }
    }
}
```

```
e.printStackTrace();
System.out.println(e.getStatusCode());
System.out.println(e.getRequestId());
System.out.println(e.getErrorCode());
System.out.println(e.getErrorMsg());
    }
}
}
```

Python

取消定时任务。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CancelScheduleTaskRequest()
        listJobIdsbody = [
            "56d3c1138dcf4f1da73b0170700c78d0"
        ]
        request.body = CancelScheduleTask(
            job_ids=listJobIdsbody
        )
        response = client.cancel_schedule_task(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

取消定时任务。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CancelScheduleTaskRequest{}
    var listJobIdsbody = []string{
        "56d3c1138dcf4f1da73b0170700c78d0",
    }
    request.Body = &model.CancelScheduleTask{
        JobIds: listJobIdsbody,
    }
    response, err := client.CancelScheduleTask(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13.5 删除指定任务记录

功能介绍

删除指定任务记录。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/jobs/{job_id}

表 4-918 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
job_id	是	String	任务ID，通过 获取即时任务列表 获取job_id。

请求参数

表 4-919 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：400

表 4-920 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-921 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除指定任务记录。

```
DELETE https://{endpoint}/v3/619d3e78f61b4be68bc5aa0b59edcf7b/jobs/6b00c41d-  
d54f-4bcb-80da-566ccedc2b5d
```

响应示例

状态码：200

Success.

```
{ }
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class DeleteTaskRecordSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()
```



```
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
DeleteTaskRecordRequest request = new DeleteTaskRecordRequest();
request.withJobId("{job_id}");
try {
    DeleteTaskRecordResponse response = client.deleteTaskRecord(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteTaskRecordRequest()
        request.job_id = "{job_id}"
        response = client.delete_task_record(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
)
```

```
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteTaskRecordRequest{}
    request.JobId = "{job_id}"
    response, err := client.DeleteTaskRecord(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.13.6 删除定时任务

功能介绍

删除定时任务。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instance/{instance_id}/scheduled-jobs

表 4-922 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-923 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-924 请求 Body 参数

参数	是否必选	参数类型	描述
job_id	是	String	任务ID。

响应参数

状态码：200

表 4-925 响应 Body 参数

参数	参数类型	描述
result	Boolean	结果。

状态码：400

表 4-926 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-927 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除调度任务。

```
DELETE https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instance/  
34cbc6c13e074761a0f893e9f30e6edfin07/scheduled-jobs  
  
{  
  "job_id": "54c219a29a5f477ba69e36d0116d05d7"  
}
```

响应示例

状态码：200

Success.

```
{  
  "result": true  
}
```

SDK 代码示例

SDK代码示例如下。

Java

删除调度任务。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DeleteScheduleTaskSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        DeleteScheduleTaskRequest request = new DeleteScheduleTaskRequest();
        request.withInstanceId("{instance_id}");
        DeleteScheduleTaskRequestBody body = new DeleteScheduleTaskRequestBody();
        body.withJobId("54c219a29a5f477ba69e36d0116d05d7");
        request.withBody(body);
        try {
            DeleteScheduleTaskResponse response = client.deleteScheduleTask(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

删除调度任务。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
```

```
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteScheduleTaskRequest()
        request.instance_id = "{instance_id}"
        request.body = DeleteScheduleTaskRequestBody(
            job_id="54c219a29a5f477ba69e36d0116d05d7"
        )
        response = client.delete_schedule_tas_k(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

删除调度任务。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())
```

```
request := &model.DeleteScheduleTaskRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.DeleteScheduleTaskRequestBody{
    JobId: "54c219a29a5f477ba69e36d0116d05d7",
}
response, err := client.DeleteScheduleTask(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.14 智能诊断

4.14.1 获取各指标的异常实例数

功能介绍

获取各指标的异常实例数。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/diagnosis-instance-count

表 4-928 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-929 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-930 响应 Body 参数

参数	参数类型	描述
diagnosis_info	Array of DiagnosisInfo objects	诊断信息列表。

表 4-931 DiagnosisInfo

参数	参数类型	描述
metric_name	String	指标名称。
count	Integer	实例数量。

状态码：400

表 4-932 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-933 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

通过project_id获取各指标的异常实例数。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/diagnosis-instance-count
```

响应示例

状态码：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
  }
]
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowIntelligentDiagnosisAbnormalCountOfInstancesSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        ShowIntelligentDiagnosisAbnormalCountOfInstancesRequest request = new
        ShowIntelligentDiagnosisAbnormalCountOfInstancesRequest();
        try {
            ShowIntelligentDiagnosisAbnormalCountOfInstancesResponse response =
            client.showIntelligentDiagnosisAbnormalCountOfInstances(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
```

```
# In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak = os.environ["CLOUD_SDK_AK"]
sk = os.environ["CLOUD_SDK_SK"]
projectId = "{project_id}"

credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ShowIntelligentDiagnosisAbnormalCountOfInstancesRequest()
    response = client.show_intelligent_diagnosis_abnormal_count_of_instances(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/taurusdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowIntelligentDiagnosisAbnormalCountOfInstancesRequest{}
    response, err := client.ShowIntelligentDiagnosisAbnormalCountOfInstances(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.14.2 获取某个指标的异常实例信息

功能介绍

获取某个指标的异常实例信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/diagnosis-instance-infos

表 4-934 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 4-935 Query 参数

参数	是否必选	参数类型	描述
metric_name	是	String	指标名。

参数	是否必选	参数类型	描述
offset	是	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	是	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-936 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-937 响应 Body 参数

参数	参数类型	描述
total_count	Integer	当前指标的异常实例总数。
instance_infos	Array of InstanceInfoForDiagnosis objects	异常实例信息。

表 4-938 InstanceInfoForDiagnosis

参数	参数类型	描述
instance_id	String	实例ID。
master_node_id	String	主节点ID。

状态码：400

表 4-939 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-940 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

通过project_id以及指标名分页获取各指标的异常实例信息。

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/diagnosis-instance-infos?metric_name=high_pressure&offset=0&limit=10
```

响应示例

状态码：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" : "637d96ffb6745ff835445fe87d08fc5no07"
}, {
  "instance_id" : "d0da4882ebdf44bd9d3f1edf9b0bd4a2in07",
  "master_node_id" : "7a670f4ecdf14db5a4b5df737b0911a5no07"
}]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowIntelligentDiagnosisInstanceInfosPerMetricSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        ShowIntelligentDiagnosisInstanceInfosPerMetricRequest request = new
        ShowIntelligentDiagnosisInstanceInfosPerMetricRequest();
        try {
            ShowIntelligentDiagnosisInstanceInfosPerMetricResponse response =
            client.showIntelligentDiagnosisInstanceInfosPerMetric(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowIntelligentDiagnosisInstanceInfosPerMetricRequest()
        response = client.show_intelligent_diagnosis_instance_infos_per_metric(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
```



```
Build()  
  
request := &model.ShowIntelligentDiagnosisInstanceInfosPerMetricRequest{}  
response, err := client.ShowIntelligentDiagnosisInstanceInfosPerMetric(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15 HTAP-标准版

4.15.1 恢复 StarRocks 数据同步

功能介绍

恢复StarRocks数据同步。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
resume

表 4-941 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-942 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。通过调用IAM服务 获取用户Token 接口获取。请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。取值范围： - en-us - zh-cn

表 4-943 请求 Body 参数

参数	是否必选	参数类型	描述
task_name	是	String	同步任务名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

响应参数

状态码：200

表 4-944 响应 Body 参数

参数	参数类型	描述
job_id	String	恢复数据同步的任务ID。

状态码：400

表 4-945 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-946 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
POST https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/resume
{
  "task_name": "task_name"
}
```

响应示例

状态码: 200

Success

```
{
  "job_id": "123"
}
```

状态码: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
```

```
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ResumeStarRocksDataReplicationSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ResumeStarRocksDataReplicationRequest request = new ResumeStarRocksDataReplicationRequest();
        request.withInstanceId("{instance_id}");
        ResumeStarRocksDataReplication body = new ResumeStarRocksDataReplication();
        body.withTaskName("task_name");
        request.withBody(body);
        try {
            ResumeStarRocksDataReplicationResponse response =
client.resumeStarRocksDataReplication(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"
```

```
credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = ResumeStarRocksDataReplicationRequest()
    request.instance_id = "{instance_id}"
    request.body = ResumeStarRocksDataReplication(
        task_name="task_name"
    )
    response = client.resume_star_rocks_data_replication(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResumeStarRocksDataReplicationRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.ResumeStarRocksDataReplication{
        TaskName: "task_name",
    }
    response, err := client.ResumeStarRocksDataReplication(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.2 暂停 StarRocks 数据同步

功能介绍

暂停StarRocks数据同步。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
pause

表 4-947 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-948 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。通过调用IAM服务 获取用户Token 接口获取。请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。取值范围： - en-us - zh-cn

表 4-949 请求 Body 参数

参数	是否必选	参数类型	描述
task_name	是	String	同步任务名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

响应参数

状态码：200

表 4-950 响应 Body 参数

参数	参数类型	描述
job_id	String	恢复数据同步的任务ID。

状态码：400

表 4-951 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-952 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
POST https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/pause
{
  "task_name" : "task_name"
}
```

响应示例

状态码: 200

Success

```
{
  "job_id" : "123"
}
```

状态码: 400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class PauseStarRocksDataReplicationSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
```



```
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
PauseStarRocksDataReplicationRequest request = new PauseStarRocksDataReplicationRequest();
request.withInstanceld("{instance_id}");
PauseStarRocksDataReplication body = new PauseStarRocksDataReplication();
body.withTaskName("task_name");
request.withBody(body);
try {
    PauseStarRocksDataReplicationResponse response = client.pauseStarRocksDataReplication(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = PauseStarRocksDataReplicationRequest()
        request.instance_id = "{instance_id}"
        request.body = PauseStarRocksDataReplication(
            task_name="task_name"
        )
        response = client.pause_star_rocks_data_replication(request)
        print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.PauseStarRocksDataReplicationRequest{
        request.InstanceId = "{instance_id}"
        request.Body = &model.PauseStarRocksDataReplication{
            TaskName: "task_name",
        }
    }
    response, err := client.PauseStarRocksDataReplication(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

4.15.3 HTAP 数据同步表配置校验

功能介绍

HTAP数据同步表配置校验。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
table-config-check

表 4-953 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-954 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-955 请求 Body 参数

参数	是否必选	参数类型	描述
source_instance_id	否	String	TaurusDB实例ID。
source_node_id	否	String	TaurusDB只读节点ID。
source_database_name	否	String	TaurusDB数据库名。字符长度限制3~1024位，仅支持英文大小写字母、数字以及下划线。
task_name	否	String	同步任务名称。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
db_configs	否	Array of DbConfig objects	库配置列表。
tables_configs	否	Array of TablesConfig objects	表配置信息。
table_repl_config	否	TableReplConfig object	表同步配置信息。
target_database_name	否	String	目标数据库名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
is_create_task	否	String	是否创建同步任务

表 4-956 DbConfig

参数	是否必选	参数类型	描述
param_name	否	String	参数名。
value	否	String	参数值。

表 4-957 TablesConfig

参数	是否必选	参数类型	描述
table_name	否	String	表名。
table_config	否	String	表配置值。

表 4-958 TableReplConfig

参数	是否必选	参数类型	描述
repl_type	否	String	表同步类型。include_tables: 白名单, exclude_tables: 黑名单。
repl_scope	否	String	表同步范围。all: 全量同步, part: 部分同步。
tables	否	Array of strings	白名单或黑名单的表范围。

响应参数

状态码: 200

表 4-959 响应 Body 参数

参数	参数类型	描述
source_database_name	String	TaurusDB数据库名。字符长度限制3~1024位, 仅支持英文大小写字母、数字以及下划线。
target_database_name	String	目标数据库名。字符长度限制3~128位, 仅支持英文大小写字母、数字以及下划线。
tbl_config_check_results	Array of TableConfigCheckResult objects	表配置检查结果。
task_name	String	同步任务名称。字符长度限制3~128位, 仅支持英文大小写字母、数字以及下划线。

表 4-960 TableConfigCheckResult

参数	参数类型	描述
table_name	String	表名
table_config	String	表配置项
check_result	String	校验结果, success/failed

状态码: 400

表 4-961 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-962 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

POST https://{localhost}/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"
}
```

响应示例

状态码: 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"
  } ]
}
```

状态码: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;
```

```
import java.util.List;
import java.util.ArrayList;

public class CheckTableConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CheckTableConfigRequest request = new CheckTableConfigRequest();
        request.withInstanceId("{instance_id}");
        TableConfigCheckRequestV3 body = new TableConfigCheckRequestV3();
        TableReplConfig tableReplConfigbody = new TableReplConfig();
        tableReplConfigbody.withReplType(TableReplConfig.ReplTypeEnum.fromValue("include_tables"))
            .withReplScope(TableReplConfig.ReplScopeEnum.fromValue("all"));
        List<DbConfig> listbodyDbConfigs = new ArrayList<>();
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("enable_chunk_level_dump")
                .withValue("false")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("snapshot_with_lock")
                .withValue("true")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("sync_commit_interval_ms")
                .withValue("5000")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("max_sync_commit_rows")
                .withValue("500000")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("max_sync_commit_bytes")
                .withValue("268435456")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("max_full_sync_task_threads_num")
                .withValue("1")
        );
        listbodyDbConfigs.add(
            new DbConfig()
                .withParamName("max_rows_per_chunk")
                .withValue("0")
        );
        listbodyDbConfigs.add(
            new DbConfig()
        );
    }
}
```



```
        .withParamName("max_bytes_per_chunk")
        .withValue("268435456")
    );
    listbodyDbConfigs.add(
        new DbConfig()
            .withParamName("binlog_expire_logs_seconds")
            .withValue("0")
    );
    body.withIsCreateTask("true");
    body.withTargetDatabaseName("target_database_name");
    body.withTableReplConfig(tableReplConfigbody);
    body.withDbConfigs(listbodyDbConfigs);
    body.withSourceDatabaseName("source_database_name");
    body.withSourceNodeId("source_node_id");
    body.withSourceInstanceId("source_instance_id");
    request.withBody(body);
    try {
        CheckTableConfigResponse response = client.checkTableConfig(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CheckTableConfigRequest()
        request.instance_id = "{instance_id}"
        tableReplConfigbody = TableReplConfig(
            repl_type="include_tables",
            repl_scope="all"
        )
        listDbConfigsbody = [
            DbConfig(
```

```
        param_name="enable_chunk_level_dump",
        value="false"
    ),
    DbConfig(
        param_name="snapshot_with_lock",
        value="true"
    ),
    DbConfig(
        param_name="sync_commit_interval_ms",
        value="5000"
    ),
    DbConfig(
        param_name="max_sync_commit_rows",
        value="500000"
    ),
    DbConfig(
        param_name="max_sync_commit_bytes",
        value="268435456"
    ),
    DbConfig(
        param_name="max_full_sync_task_threads_num",
        value="1"
    ),
    DbConfig(
        param_name="max_rows_per_chunk",
        value="0"
    ),
    DbConfig(
        param_name="max_bytes_per_chunk",
        value="268435456"
    ),
    DbConfig(
        param_name="binlog_expire_logs_seconds",
        value="0"
    )
]
request.body = TableConfigCheckRequestV3(
    is_create_task="true",
    target_database_name="target_database_name",
    table_repl_config=tableReplConfigbody,
    db_configs=listDbConfigsbody,
    source_database_name="source_database_name",
    source_node_id="source_node_id",
    source_instance_id="source_instance_id"
)
response = client.check_table_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/taurusdb-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/taurusdb-sdk-go-v3/services/taurusdb/v3"
    "github.com/huaweicloud/taurusdb-sdk-go-v3/services/taurusdb/v3/model"
    region "github.com/huaweicloud/taurusdb-sdk-go-v3/services/taurusdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
```

```
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CheckTableConfigRequest{}
request.InstanceId = "{instance_id}"
replTypeTableReplConfig:= model.GetTableReplConfigReplTypeEnum().INCLUDE_TABLES
replScopeTableReplConfig:= model.GetTableReplConfigReplScopeEnum().ALL
tableReplConfigbody := &model.TableReplConfig{
    ReplType: &replTypeTableReplConfig,
    ReplScope: &replScopeTableReplConfig,
}
paramNameDbConfigs:= "enable_chunk_level_dump"
valueDbConfigs:= "false"
paramNameDbConfigs1:= "snapshot_with_lock"
valueDbConfigs1:= "true"
paramNameDbConfigs2:= "sync_commit_interval_ms"
valueDbConfigs2:= "5000"
paramNameDbConfigs3:= "max_sync_commit_rows"
valueDbConfigs3:= "500000"
paramNameDbConfigs4:= "max_sync_commit_bytes"
valueDbConfigs4:= "268435456"
paramNameDbConfigs5:= "max_full_sync_task_threads_num"
valueDbConfigs5:= "1"
paramNameDbConfigs6:= "max_rows_per_chunk"
valueDbConfigs6:= "0"
paramNameDbConfigs7:= "max_bytes_per_chunk"
valueDbConfigs7:= "268435456"
paramNameDbConfigs8:= "binlog_expire_logs_seconds"
valueDbConfigs8:= "0"
var listDbConfigsbody = []model.DbConfig{
    {
        ParamName: &paramNameDbConfigs,
        Value: &valueDbConfigs,
    },
    {
        ParamName: &paramNameDbConfigs1,
        Value: &valueDbConfigs1,
    },
    {
        ParamName: &paramNameDbConfigs2,
        Value: &valueDbConfigs2,
    },
    {
        ParamName: &paramNameDbConfigs3,
        Value: &valueDbConfigs3,
    },
    {
        ParamName: &paramNameDbConfigs4,
        Value: &valueDbConfigs4,
    },
    {
        ParamName: &paramNameDbConfigs5,
        Value: &valueDbConfigs5,
    },
}
```

```
{
  ParamName: &paramNameDbConfigs6,
  Value: &valueDbConfigs6,
},
{
  ParamName: &paramNameDbConfigs7,
  Value: &valueDbConfigs7,
},
{
  ParamName: &paramNameDbConfigs8,
  Value: &valueDbConfigs8,
},
}
isCreateTaskTableConfigCheckRequestV3:= "true"
targetDatabaseNameTableConfigCheckRequestV3:= "target_database_name"
sourceDatabaseNameTableConfigCheckRequestV3:= "source_database_name"
sourceNodeIdTableConfigCheckRequestV3:= "source_node_id"
sourceInstanceIdTableConfigCheckRequestV3:= "source_instance_id"
request.Body = &model.TableConfigCheckRequestV3{
  IsCreateTask: &isCreateTaskTableConfigCheckRequestV3,
  TargetDatabaseName: &targetDatabaseNameTableConfigCheckRequestV3,
  TableReplConfig: tableReplConfigbody,
  DbConfigs: &listDbConfigsbody,
  SourceDatabaseName: &sourceDatabaseNameTableConfigCheckRequestV3,
  SourceNodeId: &sourceNodeIdTableConfigCheckRequestV3,
  SourceInstanceId: &sourceInstanceIdTableConfigCheckRequestV3,
}
response, err := client.CheckTableConfig(request)
if err == nil {
  fmt.Printf("%v\n", response)
} else {
  fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.4 创建 StarRocks 实例

功能介绍

创建StarRocks实例。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks

表 4-963 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	TaurusDB数据库实例ID，严格匹配UUID规则。

请求参数

表 4-964 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-965 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	实例名称。同一租户下，同类型的实例名可重名。 取值范围：最小为4个字符，最大为64个字符且不超过64个字节，必须以字母开头，区分大小写，可以包含字母、数字、中划线、下划线，不能包含其他特殊字符。不支持中文名。
engine	是	engine object	引擎信息。
ha	是	ha object	部署信息。
fe_flavor_id	是	String	FE节点规格ID。使用可通过查询HTAP规格响应消息中的“id”。
be_flavor_id	是	String	BE节点规格ID。使用可通过查询HTAP规格响应消息中的“id”。
db_root_pwd	是	String	数据库密码。 取值范围：至少包含以下字符的三种：大小写字母、数字和特殊符号~!@#\$%^*_-=+?,()& .，长度8~32个字符。建议您输入高强度密码，以提高安全性，防止出现密码被暴力破解等安全风险。如果您输入弱密码，系统会自动判定密码非法。
fe_count	是	Integer	FE节点数。 <ul style="list-style-type: none">• 单机时固定为1• 集群时取值[3, 10]
be_count	是	Integer	BE节点数。 <ul style="list-style-type: none">• 单机时固定为1• 集群时取值[3, 10]
az_mode	是	String	可用区类型。 当前仅支持single。
fe_volume	是	fe_volume object	FE节点存储规格。
be_volume	是	be_volume object	BE节点存储规格。
az_code	是	String	可用区代码。

参数	是否必选	参数类型	描述
time_zone	否	String	时区。默认时区为UTC+08:00。
tags_info	是	tags_info object	标签信息。
security_group_id	否	String	实例安全组ID。默认与Taurus安全组ID一致。
pay_info	否	pay_info object	支付信息。包周期场景必填。
region_code	否	String	可用区。包周期场景必填。

表 4-966 engine

参数	是否必选	参数类型	描述
type	是	String	引擎类型。仅支持star-rocks。
version	是	String	引擎大版本号。

表 4-967 ha

参数	是否必选	参数类型	描述
mode	是	String	部署模式。

表 4-968 fe_volume

参数	是否必选	参数类型	描述
io_type	是	String	磁盘类型。通过查询HTAP引擎资源返回消息获取。
capacity_in_gb	是	Integer	磁盘容量，单位GB 增长的步长：10GB。

表 4-969 be_volume

参数	是否必选	参数类型	描述
io_type	是	String	磁盘类型。通过查询HTAP引擎资源返回消息获取。

参数	是否必选	参数类型	描述
capacity_in_gb	是	Integer	磁盘容量，单位GB 增长的步长：10GB。

表 4-970 tags_info

参数	是否必选	参数类型	描述
sys_tags	是	Array of sys_tags objects	系统标签。

表 4-971 sys_tags

参数	是否必选	参数类型	描述
key	是	String	标签键。
value	是	String	标签值。

表 4-972 pay_info

参数	是否必选	参数类型	描述
pay_model	否	String	计费模式，默认0。包周期场景必填。 取值范围： <ul style="list-style-type: none">0：按需计费1：包周期
period	否	String	包周期周期。包周期场景必填。
period_type	否	String	包周期周期类型。包周期场景必填。 取值范围： <ul style="list-style-type: none">2：包月3：包年
is_auto_renew	否	String	包周期是否自动续费。包周期场景必填。 取值范围： <ul style="list-style-type: none">1：自动续费0：不自动续费

响应参数

状态码：201

表 4-973 响应 Body 参数

参数	参数类型	描述
instance	instance object	实例信息。
job_id	String	工作流ID。

表 4-974 instance

参数	参数类型	描述
id	String	StarRocks实例ID, 严格匹配UUID规则。
az_code	String	可用区码。
az_mode	String	可用区模式。 取值范围： single: 单可用区。 multi: 多可用区。
name	String	实例名称。
engine	engine object	引擎信息。
vpc_id	String	虚拟私有云ID。
security_group_id	String	安全组ID。
sub_net_id	String	子网ID。
db_user	String	数据库用户。默认root。
port	Integer	数据库端口号。默认3306。
ha_mode	String	部署模式。
pay_info	pay_info object	计费信息。
enable_ssl	Boolean	SSL开关。
status	String	实例状态。
region	String	实例所在区域。
tags_info	tags_info object	实例标签。

表 4-975 engine

参数	参数类型	描述
type	String	引擎类型。
version	String	引擎大版本号。

表 4-976 pay_info

参数	参数类型	描述
pay_model	String	计费模式。 <ul style="list-style-type: none">0: 按需计费1: 包周期 StarRocks实例当前只支持按需计费，默认值为0
order_id	String	包周期计费ID。
period	String	包周期周期。
period_type	String	包周期周期类型。
is_auto_renew	String	包周期是否自动续费。

表 4-977 tags_info

参数	参数类型	描述
tags	Array of tags objects	用户标签。默认为空。
sys_tags	Array of sys_tags objects	系统标签。

表 4-978 tags

参数	参数类型	描述
key	String	标签键。
value	String	标签值。

表 4-979 sys_tags

参数	参数类型	描述
key	String	标签键。
value	String	标签值。

状态码: 400

表 4-980 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-981 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建数据库实例

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": "cn-southwest-244b",
"time_zone": "UTC+08:00",
"tags_info": {
  "sys_tags": [ {
    "key": "_sys_enterprise_project_id",
    "value": "0"
  } ]
}
```

响应示例

状态码: 201

Success.

```
{
  "instance": {
    "id": "590031445ef845bb912d7fc8243db80cin17",
    "az_code": "cn-southwest-244b",
    "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": "cn-southwest-244",
    "tags_info": {
      "tags": [ ],
      "sys_tags": [ {
        "key": "_sys_enterprise_project_id",
        "value": "0"
      } ]
    }
  },
  "job_id": "cf0b7506-1505-450f-9d95-ce9d93b6b5c3"
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建数据库实例

```
package com.huaweicloud.sdk.test;
```

```
import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateStarrocksInstanceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CreateStarrocksInstanceRequest request = new CreateStarrocksInstanceRequest();
        request.withInstanceId("{instance_id}");
        StarRocksCreateRequest body = new StarRocksCreateRequest();
        List<StarRocksCreateRequestTagsInfoSysTags> listTagsInfoSysTags = new ArrayList<>();
        listTagsInfoSysTags.add(
            new StarRocksCreateRequestTagsInfoSysTags()
                .withKey(StarRocksCreateRequestTagsInfoSysTags.KeyEnum.fromValue("_sys_enterprise_project_id")
                ))
            .withValue(StarRocksCreateRequestTagsInfoSysTags.ValueEnum.fromValue("0"))
        );
        StarRocksCreateRequestTagsInfo tagsInfobody = new StarRocksCreateRequestTagsInfo();
        tagsInfobody.withSysTags(listTagsInfoSysTags);
        StarRocksCreateRequestBeVolume beVolumebody = new StarRocksCreateRequestBeVolume();
        beVolumebody.withIoType("SSD")
            .withCapacityInGb(50);
        StarRocksCreateRequestFeVolume feVolumebody = new StarRocksCreateRequestFeVolume();
        feVolumebody.withIoType("SSD")
            .withCapacityInGb(50);
        StarRocksCreateRequestHa habody = new StarRocksCreateRequestHa();
        habody.withMode(StarRocksCreateRequestHa.ModeEnum.fromValue("Single"));
        StarRocksCreateRequestEngine enginebody = new StarRocksCreateRequestEngine();
        enginebody.withType("star-rocks")
            .withVersion("3.1");
        body.withTagsInfo(tagsInfobody);
        body.withTimeZone("UTC+08:00");
        body.withAzCode("cn-southwest-244b");
        body.withBeVolume(beVolumebody);
        body.withFeVolume(feVolumebody);
        body.withAzMode(StarRocksCreateRequest.AzModeEnum.fromValue("single"));
        body.withBeCount(1);
        body.withFeCount(1);
        body.withDbRootPwd("Test@123!");
        body.withBeFlavorId("de565db8-0a96-37ea-9388-61167624712c");
        body.withFeFlavorId("afef3bfd-ac7c-32e1-ba44-c388acbb196a");
        body.withHa(habody);
        body.withEngine(enginebody);
    }
}
```

```
body.withName("htap-ff64");
request.withBody(body);
try {
    CreateStarrocksInstanceResponse response = client.createStarrocksInstance(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

创建数据库实例

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateStarrocksInstanceRequest()
        request.instance_id = "{instance_id}"
        listSysTagsTagsInfo = [
            StarRocksCreateRequestTagsInfoSysTags(
                key="_sys_enterprise_project_id",
                value="0"
            )
        ]
        tagsInfoBody = StarRocksCreateRequestTagsInfo(
            sys_tags=listSysTagsTagsInfo
        )
        beVolumebody = StarRocksCreateRequestBeVolume(
            io_type="SSD",
            capacity_in_gb=50
        )
        feVolumebody = StarRocksCreateRequestFeVolume(
            io_type="SSD",
            capacity_in_gb=50
        )
        habody = StarRocksCreateRequestHa(
```

```
        mode="Single"
    )
    enginebody = StarRocksCreateRequestEngine(
        type="star-rocks",
        version="3.1"
    )
    request.body = StarRocksCreateRequest(
        tags_info=tagsInfobody,
        time_zone="UTC+08:00",
        az_code="cn-southwest-244b",
        be_volume=beVolumebody,
        fe_volume=feVolumebody,
        az_mode="single",
        be_count=1,
        fe_count=1,
        db_root_pwd="Test@123!",
        be_flavor_id="de565db8-0a96-37ea-9388-61167624712c",
        fe_flavor_id="afef3bfd-ac7c-32e1-ba44-c388acbb196a",
        ha=habody,
        engine=enginebody,
        name="htap-ff64"
    )
    response = client.create_starrocks_instance(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

创建数据库实例

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateStarrocksInstanceRequest{}
    request.InstanceId = "{instance_id}"
    var listSysTagsTagsInfo = []model.StarRocksCreateRequestTagsInfoSysTags{
```

```

{
    Key: model.GetStarRocksCreateRequestTagsInfoSysTagsKeyEnum().SYSENERPRISEPROJECTID,
    Value: model.GetStarRocksCreateRequestTagsInfoSysTagsValueEnum().E_0,
},
},
tagsInfobody := &model.StarRocksCreateRequestTagsInfo{
    SysTags: listSysTagsTagsInfo,
}
beVolumebody := &model.StarRocksCreateRequestBeVolume{
    IoType: "SSD",
    CapacityInGb: int32(50),
}
feVolumebody := &model.StarRocksCreateRequestFeVolume{
    IoType: "SSD",
    CapacityInGb: int32(50),
}
habody := &model.StarRocksCreateRequestHa{
    Mode: model.GetStarRocksCreateRequestHaModeEnum().SINGLE,
}
enginebody := &model.StarRocksCreateRequestEngine{
    Type: "star-rocks",
    Version: "3.1",
}
timeZoneStarRocksCreateRequest:= "UTC+08:00"
request.Body = &model.StarRocksCreateRequest{
    TagsInfo: tagsInfobody,
    TimeZone: &timeZoneStarRocksCreateRequest,
    AzCode: "cn-southwest-244b",
    BeVolume: beVolumebody,
    FeVolume: feVolumebody,
    AzMode: model.GetStarRocksCreateRequestAzModeEnum().SINGLE,
    BeCount: int32(1),
    FeCount: int32(1),
    DbRootPwd: "Test@123!",
    BeFlavorId: "de565db8-0a96-37ea-9388-61167624712c",
    FeFlavorId: "afef3bfd-ac7c-32e1-ba44-c388acbb196a",
    Ha: habody,
    Engine: enginebody,
    Name: "htap-ff64",
}
response, err := client.CreateStarrocksInstance(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
    
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.5 查询 StarRocks 实例

功能介绍

查询StarRocks实例。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/{starrocks_instance_id}

表 4-982 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	TaurusDB实例ID, 严格匹配UUID规则。
starrocks_instance_id	是	String	StarRocks实例ID, 严格匹配UUID规则。

请求参数

表 4-983 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值: application/json。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-984 响应 Body 参数

参数	参数类型	描述
instances	Array of instances objects	实例信息。

表 4-985 instances

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。
public_ip	String	公网访问IP。
data_vip	String	StarRocks FE节点类型数据IP（多个IP使用逗号分隔）
can_enable_public_access	Boolean	是否可公网访问。
current_backup_node_id	String	备份节点ID。
cluster_mode	String	部署模式。
status	String	实例状态。
is_frozen	Integer	是否冻结。
frozen_time	Long	冻结时间。
db_user	String	默认用户名。
bak_period	String	备份周期。
bak_keep_day	Integer	备份保存天数。

参数	参数类型	描述
bak_expected_start_time	Long	备份预计开始时间。
data_store_version_id	String	数据库版本ID。
data_store_version	String	数据库版本。
data_store_type	String	数据库引擎。
create_at	Long	实例创建时间。
update_at	Long	实例更新时间。
delete_at	Long	实例删除时间。
db_port	String	数据库端口号。
param_group	String	参数组。
actions	Array of QueryAction objects	实例动作。
create_fail_error_code	String	实例创建失败错误码。
groups	Array of groups objects	实例分组。
ops_window	ops_window object	实例操作时间窗。
tags_info	tags_info object	实例标签。
time_zone	String	时区。
backup_used_space	String	备份使用空间。
az_mode	String	可用区模式。 取值范围： <ul style="list-style-type: none">• single: 单可用区• multi: 多可用区
enterprise_project_id	String	企业项目ID。
port_info	port_info object	端口信息。
fe_node_volume_code	String	FE节点磁盘类型。

参数	参数类型	描述
be_node_volume_code	String	BE节点磁盘类型。
fe_node_volume_size	String	FE节点磁盘大小。
be_node_volume_size	String	BE节点磁盘大小。
support_data_replication	Boolean	是否支持数据同步。
new_version_available	Boolean	是否有数据库新版本。
ssl_option	Boolean	SSL开关。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
pay_model	String	支付模式。

表 4-986 groups

参数	参数类型	描述
id	String	分组ID。
name	String	分组名。
nodes	Array of nodes objects	实例节点。
group_type_name	String	实例分组类型名。
group_node_type	String	实例分组节点类型。

表 4-987 nodes

参数	参数类型	描述
id	String	实例节点ID。
name	String	实例节点名。
type	String	实例节点类型。

参数	参数类型	描述
status	String	节点状态。 取值： 值为“creating”，表示节点正在创建。 值为“normal”，表示节点正常。 值为“abnormal”，表示节点异常。 值为“createfail”，表示节点创建失败。
period	String	实例节点包周期。1代表包周期。
volume	volume object	实例节点存储信息。
cpu	String	实例节点cpu数量。
mem	String	实例节点内存大小（GB）。
datastore	datastore object	数据库信息。
actions	Array of QueryAction objects	节点动作。
priority	Integer	节点优先级。
frozen_flag	Integer	冻结标志。
db_port	Integer	数据库端口号。默认3306。
pay_model	String	支付模式。
order_id	String	订单号。
traffic_ip	String	数据IP。
traffic_ipv6	String	数据IPV6。
az_code	String	可用区代码。
az_description	String	可用区描述。
az_type	String	可用区类型。
region_code	String	实例所在区域。
create_at	Long	节点创建时间。
update_at	Long	节点更新时间。
flavor_id	String	节点规格ID。
flavor_ref	String	节点规格码。
iass_flavor_ref	String	IASS规格码。
max_connections	String	公网最大连接数。

参数	参数类型	描述
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网ID。
need_restart	Boolean	参数更新是否需要重启。
sg_id	String	安全组。
param_group	Map<String,ParamGroup>	参数组信息。

表 4-988 volume

参数	参数类型	描述
type	String	实例节点存储类型。
size	String	实例节点存储大小。

表 4-989 datastore

参数	参数类型	描述
id	String	数据库ID。
type	String	数据库类型。
version	String	数据库版本。

表 4-990 QueryAction

参数	参数类型	描述
id	String	实例或节点动作ID。
action	String	实例或节点动作名称。
object_id	String	实例或节点动作对象ID。
type	String	实例或节点动作类型。
job_id	String	实例或节点动作任务ID。
status	String	实例或节点动作状态。
created_at	Long	实例或节点动作创建时间。
updated_at	Long	实例或节点动作更新时间。

表 4-991 ParamGroup

参数	参数类型	描述
id	String	参数组ID。
name	String	参数组名。

表 4-992 ops_window

参数	参数类型	描述
period	String	时间窗周期。
start_time	String	时间窗开始时间。
end_time	String	时间窗结束时间。

表 4-993 tags_info

参数	参数类型	描述
tags	Array of tags objects	用户标签。
sys_tags	Array of sys_tags objects	系统标签。

表 4-994 tags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。 字符集：A-Z, a-z, 0-9, '-', '_', UNICODE字符 (\u4E00-\u9FFF)。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '.', '-', '_', UNICODE字符 (\u4E00-\u9FFF)。

表 4-995 sys_tags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。 字符集：A-Z, a-z, 0-9, '-', '_', UNICOD字符 (\u4E00-\u9FFF)。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '-', '_', UNICOD字符 (\u4E00-\u9FFF)。

表 4-996 port_info

参数	参数类型	描述
mysql_port	Integer	MySQL端口号。默认3306。

状态码：400

表 4-997 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-998 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询某个StarRocks实例ID。


```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
fb632d1d531a4107804f0f082581810fin07/starrocks/b6280c323ce449f2ad02af74e21f3dc5in17
```

响应示例

状态码: 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": "7739bfbc4e244a8bac0662d63683c808no17",  
        "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,  
      }  
    ],  
    "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"
}]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListStarrocksInstanceInfoSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListStarrocksInstanceInfoRequest request = new ListStarrocksInstanceInfoRequest();
        request.withInstanceId("{instance_id}");
        request.withStarrocksInstanceId("{starrocks_instance_id}");
        try {
            ListStarrocksInstanceInfoResponse response = client.listStarrocksInstanceInfo(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStarrocksInstanceInfoRequest()
        request.instance_id = "{instance_id}"
        request.starrocks_instance_id = "{starrocks_instance_id}"
        response = client.list_starrocks_instance_info(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
```

```
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListStarrocksInstanceInfoRequest{}
request.InstanceId = "{instance_id}"
request.StarrocksInstanceId = "{starrocks_instance_id}"
response, err := client.ListStarrocksInstanceInfo(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.6 删除 StarRocks 实例

功能介绍

删除StarRocks实例。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/{starrocks_instance_id}

表 4-999 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	TaurusDB实例ID，严格匹配UUID规则。
starrocks_instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1000 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1001 响应 Body 参数

参数	参数类型	描述
workflow_id	String	工作流ID。

状态码：400

表 4-1002 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1003 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

删除某个StarRocks实例

```
DELETE https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
fb632d1d531a4107804f0f082581810fin07/starrocks/9ac58f9b88744f8a87893d22f6ef9a28in17
```

响应示例

状态码：200

Success.

```
{  
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class DeleteStarrocksInstanceSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    DeleteStarrocksInstanceRequest request = new DeleteStarrocksInstanceRequest();
    request.withInstanceId("{instance_id}");
    request.withStarrocksInstanceId("{starrocks_instance_id}");
    try {
        DeleteStarrocksInstanceResponse response = client.deleteStarrocksInstance(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteStarrocksInstanceRequest()
```



```
request.instance_id = "{instance_id}"
request.starrocks_instance_id = "{starrocks_instance_id}"
response = client.delete_starrocks_instance(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStarrocksInstanceRequest{}
    request.InstanceId = "{instance_id}"
    request.StarrocksInstanceId = "{starrocks_instance_id}"
    response, err := client.DeleteStarrocksInstance(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.7 重启 StarRocks 实例

功能介绍

重启StarRocks实例。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{starrocks_instance_id}/starrocks/restart

表 4-1004 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
starrocks_instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1005 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1006 响应 Body 参数

参数	参数类型	描述
workflow_id	String	工作流ID。

状态码：400

表 4-1007 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1008 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重启某个StarRocks实例

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
9ac58f9b88744f8a87893d22f6ef9a28in17/starrocks/restart
```

响应示例

状态码：200

Success.

```
{
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class RestartStarrocksInstanceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        RestartStarrocksInstanceRequest request = new RestartStarrocksInstanceRequest();
        request.withStarrocksInstanceId("{starrocks_instance_id}");
        try {
            RestartStarrocksInstanceResponse response = client.restartStarrocksInstance(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = RestartStarrocksInstanceRequest()
        request.starrocks_instance_id = "{starrocks_instance_id}"
        response = client.restart_starrocks_instance(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
```

```
WithCredential(auth).
Build()

request := &model.RestartStarrocksInstanceRequest{}
request.StarrocksInstanceId = "{starrocks_instance_id}"
response, err := client.RestartStarrocksInstance(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.8 重启 StarRocks 节点

功能介绍

重启StarRocks节点。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{starrocks_instance_id}/starrocks/{starrocks_node_id}/restart

表 4-1009 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

参数	是否必选	参数类型	描述
starrocks_node_id	是	String	StarRocks节点ID
starrocks_instance_id	是	String	StarRocks实例ID, 严格匹配UUID规则。

请求参数

表 4-1010 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值: application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围: <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码: 200

表 4-1011 响应 Body 参数

参数	参数类型	描述
workflow_id	String	工作流ID。

状态码: 400

表 4-1012 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码：500

表 4-1013 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重启某个StarRocks实例下节点

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
9ac58f9b88744f8a87893d22f6ef9a28in17/starrocks/2c464fbdc8ea4c59814dab2243d8e270no17/restart
```

响应示例

状态码：200

Success.

```
{  
  "workflow_id" : "e1bfd0d1-b8d8-417c-9947-7e2ae0de9745"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class RestartStarrocksNodeSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
```



```
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
RestartStarrocksNodeRequest request = new RestartStarrocksNodeRequest();
request.withStarrocksNodeId("{starrocks_node_id}");
request.withStarrocksInstanceId("{starrocks_instance_id}");
try {
    RestartStarrocksNodeResponse response = client.restartStarrocksNode(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = RestartStarrocksNodeRequest()
        request.starrocks_node_id = "{starrocks_node_id}"
        request.starrocks_instance_id = "{starrocks_instance_id}"
        response = client.restart_starrocks_node(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.RestartStarrocksNodeRequest{
        request.StarrocksNodeId = "{starrocks_node_id}"
        request.StarrocksInstanceId = "{starrocks_instance_id}"
    }
    response, err := client.RestartStarrocksNode(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.9 StarRocks 资源检查

功能介绍

StarRocks资源检查。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/starrocks/resource-check

表 4-1014 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 4-1015 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1016 请求 Body 参数

参数	是否必选	参数类型	描述
action	是	String	校验类型，仅支持校验创建实例。
resource	是	resource object	资源信息。

表 4-1017 resource

参数	是否必选	参数类型	描述
enterprise_project_id	是	String	企业项目ID。
instance_num	是	Integer	实例数量。
mode	是	String	实例部署模式。
availability_zone_mode	是	String	可用区类型，目前仅支持single。
fe_node_num	是	Integer	FE节点数量。
be_node_num	是	Integer	BE节点数量。
fe_flavor_ref	是	String	FE规格码。
be_flavor_ref	是	String	BE规格码。
availability_zone	否	String	可用区码。选填，校验可用区码是否正确。
subnet_id	是	String	HTAP实例子网即TaurusDB实例子网。 获取方法请参见 获取子网ID 。

响应参数

状态码：200

表 4-1018 响应 Body 参数

参数	参数类型	描述
result	Boolean	检查结果。

状态码：400

表 4-1019 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 4-1020 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

StarRocks实例资源检查

POST https://{endpoint}/v3/8f26bcbd59e84e1d9e0569c32545cee9/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"
  }
}
```

响应示例

状态码: 200

Success.

```
{
  "result": true
}
```

SDK 代码示例

SDK代码示例如下。

Java

StarRocks实例资源检查

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CheckStarRocksResourceSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CheckStarRocksResourceRequest request = new CheckStarRocksResourceRequest();
        ResourceCheck body = new ResourceCheck();
        ResourceCheckResource resourcebody = new ResourceCheckResource();
        resourcebody.withEnterpriseProjectId("0")
            .withInstanceNum(1)
            .withMode(ResourceCheckResource.ModeEnum.fromValue("Cluster"))
            .withAvailabilityZoneMode("single")
            .withFeNodeNum(3)
            .withBeNodeNum(3)
            .withFeFlavorRef("gaussdb.sr-fe.8xlarge.x86.4")
            .withBeFlavorRef("gaussdb.sr-be.8xlarge.x86.4")
            .withAvailabilityZone("cn-southwest-244a")
            .withSubnetId("b00dc497-91e1-4082-aeb0-a1dc95e10371");
        body.withResource(resourcebody);
        body.withAction(ResourceCheck.ActionEnum.fromValue("createInstance"));
        request.withBody(body);
        try {
            CheckStarRocksResourceResponse response = client.checkStarRocksResource(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

StarRocks实例资源检查

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CheckStarRocksResourceRequest()
        resourcebody = ResourceCheckResource(
            enterprise_project_id="0",
            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"
        )
        request.body = ResourceCheck(
            resource=resourcebody,
            action="createInstance"
        )
        response = client.check_star_rocks_resource(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

StarRocks实例资源检查

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
```

```
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CheckStarRocksResourceRequest{
    availabilityZoneResource:= "cn-southwest-244a"
    resourcebody := &model.ResourceCheckResource{
        EnterpriseProjectId: "0",
        InstanceNum: int32(1),
        Mode: model.GetResourceCheckResourceModeEnum().CLUSTER,
        AvailabilityZoneMode: "single",
        FeNodeNum: int32(3),
        BeNodeNum: int32(3),
        FeFlavorRef: "gaussdb.sr-fe.8xlarge.x86.4",
        BeFlavorRef: "gaussdb.sr-be.8xlarge.x86.4",
        AvailabilityZone: &availabilityZoneResource,
        SubnetId: "b00dc497-91e1-4082-aeb0-a1dc95e10371",
    }
}
request.Body = &model.ResourceCheck{
    Resource: resourcebody,
    Action: model.GetResourceCheckActionEnum().CREATE_INSTANCE,
}
response, err := client.CheckStarRocksResource(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.10 HTAP 引擎资源查询

功能介绍

HTAP引擎资源查询。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/htap/datastores/{engine_name}

表 4-1021 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
engine_name	是	String	HTAP引擎名。 取值范围： <ul style="list-style-type: none">star-rocksclick-house

请求参数

表 4-1022 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1023 响应 Body 参数

参数	参数类型	描述
datastores	Array of datastores objects	数据库信息列表。

表 4-1024 datastores

参数	参数类型	描述
id	String	数据库版本ID, 该字段不会有重复。
name	String	数据库版本号, 只返回两位数的大版本号。
kernel_version	String	数据库内核版本号, 返回完整的四位版本号。

状态码：400

表 4-1025 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1026 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询StarRocks数据库版本信息

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/datastores/star-rock
```

响应示例

状态码：200

Success.

```
{
  "datastores" : [ {
    "id" : "38197973-8895-36ed-b853-52daee6d3a",
    "name" : "3.1",
    "kernel_version" : "3.1.6.0"
  } ]
}
```

状态码：400

Client error.

```
{
  "error_msg" : "Invalid database type.",
  "error_code" : "DBS.280235"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListHtapDataStoreSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListHtapDataStoreRequest request = new ListHtapDataStoreRequest();
        request.withEngineName("{engine_name}");
        try {
```

```
ListHtapDataStoreResponse response = client.listHtapDataStore(request);
System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListHtapDataStoreRequest()
        request.engine_name = "{engine_name}"
        response = client.list_htap_data_store(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListHtapDataStoreRequest{
    request.EngineName = "{engine_name}"
}
response, err := client.ListHtapDataStore(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.11 获取 HTAP 实例存储类型

功能介绍

获取HTAP实例存储类型。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/htap/storage-type/{database}

表 4-1027 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
database	是	String	HTAP数据库名。 取值范围： <ul style="list-style-type: none"> star-rocks click-house

表 4-1028 Query 参数

参数	是否必选	参数类型	描述
version_name	是	String	数据库大版本号

请求参数

表 4-1029 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码：200

表 4-1030 响应 Body 参数

参数	参数类型	描述
storage_type	Array of storage_type objects	存储类型。

表 4-1031 storage_type

参数	参数类型	描述
name	String	存储介质名。
az_status	Map<String,String>	可支持可用区信息。
min_volume_size	Integer	最小可提供磁盘大小。

状态码：400

表 4-1032 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1033 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询可提供给StarRocks实例的磁盘存储类型

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/storage-type/star-rocks?
version_name=3.1.6.0
```

响应示例

状态码：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
  } ]
}
```

状态码：400

Client error.

```
{
  "error_msg": "The DB engine or version is not supported.",
  "error_code": "DBS.280238"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListHtapStorageTypeSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";
    }
}
```



```
ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListHtapStorageTypeRequest request = new ListHtapStorageTypeRequest();
request.withDatabase("{database}");
try {
    ListHtapStorageTypeResponse response = client.listHtapStorageType(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListHtapStorageTypeRequest()
        request.database = "{database}"
        response = client.list_htap_storage_type(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListHtapStorageTypeRequest{}
    request.Database = "{database}"
    response, err := client.ListHtapStorageType(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.12 HTAP 查询规格信息

功能介绍

HTAP查询规格信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/htap/flavors/{engine_name}

表 4-1034 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
engine_name	是	String	HTAP引擎名。 取值范围： <ul style="list-style-type: none">star-rocksclick-house

表 4-1035 Query 参数

参数	是否必选	参数类型	描述
availability_zone_mode	否	String	可用区模式，当前仅支持single。
spec_code	否	String	规格码，提供后仅查询指定规格码规格信息。
version_name	否	String	数据库版本号，不填默认3.1.6.0。

请求参数

表 4-1036 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1037 响应 Body 参数

参数	参数类型	描述
flavors	Array of flavors objects	规格信息。

表 4-1038 flavors

参数	参数类型	描述
type	String	规格类型，取值为arm、x86和generalX86。 arm：独享型arm规格。 x86：独享型x86规格。 generalX86：通用型X86规格。
vcpus	String	CPU大小。例如：1表示1U。
ram	String	内存大小，单位为GB。
id	String	规格ID，该字段唯一。

参数	参数类型	描述
spec_code	String	资源规格编码，同创建指定的 flavor_ref。例如：gaussdb.sr-be.xlarge.x86.4。 “gaussdb.sr”代表产品。 “xlarge”代表计算规格为4U。 “x86”代表CPU架构为x86。 “4”表示vCPU和内存为1:4。
version_name	String	数据库版本号。
instance_mode	String	实例类型。目前仅支持Cluster、Single。
az_status	Map<String,String>	规格所在AZ的状态，包含以下状态： normal：在售。 unsupported：暂不支持该规格。 sellout：售罄。

状态码：400

表 4-1039 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1040 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询StarRocks规格信息

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/htap/flavors/star-rocks?availability_zone_mode=single
```

响应示例

状态码: 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": {
      "cn-southwest-244d": "normal",
      "cn-southwest-244c": "normal",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "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": {
      "cn-southwest-244d": "normal",
      "cn-southwest-244c": "normal",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "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": {
      "cn-southwest-244d": "normal",
      "cn-southwest-244c": "normal",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "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": {
      "cn-southwest-244d": "normal",
      "cn-southwest-244c": "normal",
      "cn-southwest-244b": "normal",
      "cn-southwest-244a": "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": {
  "cn-southwest-244d": "normal",
  "cn-southwest-244c": "normal",
  "cn-southwest-244b": "normal",
  "cn-southwest-244a": "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": {
    "cn-southwest-244d": "normal",
    "cn-southwest-244c": "normal",
    "cn-southwest-244b": "normal",
    "cn-southwest-244a": "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": {
    "cn-southwest-244d": "normal",
    "cn-southwest-244c": "normal",
    "cn-southwest-244b": "normal",
    "cn-southwest-244a": "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": {
    "cn-southwest-244d": "normal",
    "cn-southwest-244c": "normal",
    "cn-southwest-244b": "normal",
    "cn-southwest-244a": "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": {
    "cn-southwest-244d": "normal",
    "cn-southwest-244c": "normal",
    "cn-southwest-244b": "normal",
    "cn-southwest-244a": "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": {
  "cn-southwest-244d": "normal",
  "cn-southwest-244c": "normal",
  "cn-southwest-244b": "normal",
  "cn-southwest-244a": "unsupported"
}
}]
}
```

状态码: 400

Client error.

```
{
  "error_msg": "Invalid specification code.",
  "error_code": "DBS.280434"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListHtapFlavorSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListHtapFlavorRequest request = new ListHtapFlavorRequest();
        request.withEngineName("{engine_name}");
        try {
            ListHtapFlavorResponse response = client.listHtapFlavor(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        }
    }
}
```



```
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListHtapFlavorRequest()
        request.engine_name = "{engine_name}"
        response = client.list_htap_flavor(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
```

```
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.ListHtapFlavorRequest{}
request.EngineName = "{engine_name}"
response, err := client.ListHtapFlavor(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.13 查询 HTAP 实例列表

功能介绍

查询HTAP实例列表。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/htap

表 4-1041 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	TaurusDB实例ID，严格匹配UUID规则。

请求参数

表 4-1042 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1043 响应 Body 参数

参数	参数类型	描述
total	Integer	HTAP实例个数。
instances	Array of instances objects	HTAP实例信息。
max_htap_instance_num_of_taurus	Integer	最大HTAP实例个数。

表 4-1044 instances

参数	参数类型	描述
id	String	HTAP实例ID, 严格匹配UUID规则。
name	String	HTAP实例名。
engine_name	String	HTAP数据库引擎名。
engine_version	String	HTAP数据库引擎版本。
project_id	String	租户在某一region下的project ID
instance_state	instance_state object	HTAP实例状态信息。
create_at	Long	HTAP实例创建时间。
is_frozen	Boolean	HTAP实例是否冻结。
ha_mode	String	HTAP实例部署模式。
pay_model	String	计费模式。当前仅支持按需计费。 0: 按需计费 1: 包周期
order_id	String	包周期计费订单ID。
alter_order_id	String	包周期计费备用订单ID。
data_vip	String	读写内网地址。
readable_node_info	Array of ReadableNodeInfos objects	可读节点信息
proxy_ips	Array of strings	代理IP。
data_vip_v6	String	读写内网地址IPV6。
port	Integer	数据库访问端口。
available_zones	Array of available_zones objects	可用区信息。
current_actions	Array of QueryAction objects	实例动作。
volume_type	String	存储类型。
server_type	String	服务器类型。
enterprise_project_id	String	企业项目ID。如果账户开通企业项目服务则该参数必选, 未开启该参数不可选。

参数	参数类型	描述
dedicated_resource_id	String	专属资源池ID，只有开通专属资源池后才支持此参数。
network	network object	网络信息。
ch_master_node_id	String	ClickHouse主节点ID。
node_num	Integer	节点个数。

表 4-1045 instance_state

参数	参数类型	描述
instance_status	String	HTAP实例状态。
create_fail_error_code	String	HTAP实例创建失败错误码。
fail_message	String	HTAP实例创建失败错误信息。
wait_restart_for_params	Boolean	是否需要重启更新参数。

表 4-1046 ReadableNodeInfos

参数	参数类型	描述
data_ip	String	可读节点IP。
node_id	String	可读节点ID。
node_name	String	可读节点名称。

表 4-1047 available_zones

参数	参数类型	描述
code	String	可用区码。
description	String	可用区描述。
az_type	String	可用区类型。

表 4-1048 QueryAction

参数	参数类型	描述
id	String	实例或节点动作ID。
action	String	实例或节点动作名称。
object_id	String	实例或节点动作对象ID。
type	String	实例或节点动作类型。
job_id	String	实例或节点动作任务ID。
status	String	实例或节点动作状态。
created_at	Long	实例或节点动作创建时间。
updated_at	Long	实例或节点动作更新时间。

表 4-1049 network

参数	参数类型	描述
vpc_id	String	虚拟私有云ID。
sub_net_id	String	子网ID。
security_group_id	String	安全组ID。

状态码：400

表 4-1050 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1051 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询TaurusDB下HTAP实例列表

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
18c3eeb7b788479eb8b93b209946a83bin07/htap
```

响应示例

状态码: 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": "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
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListHtapInstanceInfoSolution {

    public static void main(String[] args) {
```



```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListHtapInstanceInfoRequest request = new ListHtapInstanceInfoRequest();
request.withInstanceId("{instance_id}");
try {
    ListHtapInstanceInfoResponse response = client.listHtapInstanceInfo(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListHtapInstanceInfoRequest()
        request.instance_id = "{instance_id}"
        response = client.list_htap_instance_info(request)
        print(response)
```

```
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListHtapInstanceInfoRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListHtapInstanceInfo(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.14 创建 StarRocks 数据同步

功能介绍

创建StarRocks数据同步。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

表 4-1052 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1053 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1054 请求 Body 参数

参数	是否必选	参数类型	描述
source_instance_id	是	String	TaurusDB实例ID。
source_node_id	否	String	TaurusDB只读节点ID。
source_database	是	String	源数据库。字符长度限制3~1024位，仅支持英文大小写字母、数字以及下划线。
target_database	是	String	目标数据库。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
task_name	是	String	同步任务名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

响应参数

状态码：200

表 4-1055 响应 Body 参数

参数	参数类型	描述
job_id	String	创建数据同步的任务ID。

状态码：400

表 4-1056 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1057 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误描述。

请求示例

```
POST https://{localhost}/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"
}
```

响应示例

状态码: 200

Success.

```
{
  "job_id": "123"
}
```

状态码: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CreateStarRocksDataReplicationSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
```

```
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();

CreateStarRocksDataReplicationRequest request = new CreateStarRocksDataReplicationRequest();
request.withInstanceId("{instance_id}");
CreateStarRocksDataReplication body = new CreateStarRocksDataReplication();
body.withTaskName("task_name");
body.withTargetDatabase("target_database");
body.withSourceDatabase("source_database");
body.withSourceNodeId("source_node_id");
body.withSourceInstanceId("source_instance_id");
request.withBody(body);
try {
    CreateStarRocksDataReplicationResponse response =
client.createStarRocksDataReplication(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CreateStarRocksDataReplicationRequest()
        request.instance_id = "{instance_id}"
```

```
request.body = CreateStarRocksDataReplication(  
    task_name="task_name",  
    target_database="target_database",  
    source_database="source_database",  
    source_node_id="source_node_id",  
    source_instance_id="source_instance_id"  
)  
response = client.create_star_rocks_data_replication(request)  
print(response)  
except exceptions.ClientRequestException as e:  
    print(e.status_code)  
    print(e.request_id)  
    print(e.error_code)  
    print(e.error_msg)
```

Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.CreateStarRocksDataReplicationRequest{}  
    request.InstanceId = "{instance_id}"  
    sourceNodeIdCreateStarRocksDataReplication:= "source_node_id"  
    request.Body = &model.CreateStarRocksDataReplication{  
        TaskName: "task_name",  
        TargetDatabase: "target_database",  
        SourceDatabase: "source_database",  
        SourceNodeId: &sourceNodeIdCreateStarRocksDataReplication,  
        SourceInstanceId: "source_instance_id",  
    }  
    response, err := client.CreateStarRocksDataReplication(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.15 删除 StarRocks 数据同步

功能介绍

删除StarRocks数据同步。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

表 4-1058 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1059 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none"> en-us zh-cn

表 4-1060 请求 Body 参数

参数	是否必选	参数类型	描述
task_name	否	String	数据同步任务名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

响应参数

状态码：200

表 4-1061 响应 Body 参数

参数	参数类型	描述
job_id	String	删除同步任务工作ID。

状态码：400

表 4-1062 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1063 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
DELETE https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication
{
  "task_name" : "task_name"
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "123"
}
```

状态码：400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class DeleteStarRocksDataReplicationSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
    }
}
```

```
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
DeleteStarRocksDataReplicationRequest request = new DeleteStarRocksDataReplicationRequest();
request.withInstanceId("{instance_id}");
DeleteStarRocksDataReplication body = new DeleteStarRocksDataReplication();
body.withTaskName("task_name");
request.withBody(body);
try {
    DeleteStarRocksDataReplicationResponse response =
client.deleteStarRocksDataReplication(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteStarRocksDataReplicationRequest()
        request.instance_id = "{instance_id}"
        request.body = DeleteStarRocksDataReplication()
```

```
        task_name="task_name"
    )
    response = client.delete_star_rocks_data_replication(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStarRocksDataReplicationRequest{}
    request.InstanceId = "{instance_id}"
    taskNameDeleteStarRocksDataReplication:= "task_name"
    request.Body = &model.DeleteStarRocksDataReplication{
        TaskName: &taskNameDeleteStarRocksDataReplication,
    }
    response, err := client.DeleteStarRocksDataReplication(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.16 查询 StarRocks 数据同步状态信息

功能介绍

查询StarRocks数据同步状态信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication

表 4-1064 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

表 4-1065 Query 参数

参数	是否必选	参数类型	描述
limit	否	String	查询记录数。每页查询数据同步任务的数量。

参数	是否必选	参数类型	描述
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。

请求参数

表 4-1066 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1067 响应 Body 参数

参数	参数类型	描述
total_count	String	查询数据同步任务数。
replications	Array of StarRocksReplicationInfo objects	数据同步任务信息。
ext_text	String	扩展字段。

表 4-1068 StarRocksReplicationInfo

参数	参数类型	描述
source_database	String	TaurusDB数据库。字符串长度限制3-1024位。
target_database	String	目标数据库。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
task_name	String	同步任务名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
status	String	当前状态。Yes: 正常, No: 异常。
stage	String	同步阶段。wait: 等待同步, incremental: 增量同步, full: 全量同步, cancelled: 删除, paused: 暂停同步。
percentage	String	进度百分比。
catchup_stage	String	追赶阶段。wait: 等待同步, incremental: 增量同步, full: 全量同步, cancelled: 删除, paused: 暂停同步。
catchup_percentage	String	追赶进度百分比。

状态码: 400

表 4-1069 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1070 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询第一页的前10个同步任务。

```
GET https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication?offset=1&limit=10
```

响应示例

状态码：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
}
```

状态码：400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListStarRocksDataReplicationsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";
```



```
ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
ListStarRocksDataReplicationsRequest request = new ListStarRocksDataReplicationsRequest();
request.withInstanceId("{instance_id}");
try {
    ListStarRocksDataReplicationsResponse response = client.listStarRocksDataReplications(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStarRocksDataReplicationsRequest()
        request.instance_id = "{instance_id}"
        response = client.list_star_rocks_data_replications(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListStarRocksDataReplicationsRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListStarRocksDataReplications(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.17 HTAP 数据同步库配置校验

功能介绍

HTAP数据同步库配置校验。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
database-config-check

表 4-1071 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID, 严格匹配UUID规则。

请求参数

表 4-1072 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1073 请求 Body 参数

参数	是否必选	参数类型	描述
source_instance_id	否	String	TaurusDB实例ID。
source_node_id	否	String	TaurusDB只读节点ID。
source_database_name	否	String	TaurusDB数据库名。字符长度限制3~1024位，仅支持英文大小写字母、数字以及下划线。
target_database_name	否	String	目标数据库名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
task_name	否	String	同步任务名称。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
db_configs	否	Array of DbConfig objects	库配置列表。
table_repl_config	否	TableReplConfig object	表配置信息。

表 4-1074 DbConfig

参数	是否必选	参数类型	描述
param_name	否	String	参数名。
value	否	String	参数值。

表 4-1075 TableReplConfig

参数	是否必选	参数类型	描述
repl_type	否	String	表同步类型。include_tables: 白名单, exclude_tables: 黑名单。
repl_scope	否	String	表同步范围。all: 全量同步, part: 部分同步。
tables	否	Array of strings	白名单或黑名单的表范围。

响应参数

状态码：200

表 4-1076 响应 Body 参数

参数	参数类型	描述
source_database_name	String	目标数据库名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
source_db_config_check_results	Array of DbConfigCheckResult objects	TaurusDB数据库配置检查结果。
target_database_name	String	目标数据库名。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。
target_db_config_check_results	Array of DbConfigCheckResult objects	目标数据库配置检查结果。
task_name	String	同步任务名称。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

表 4-1077 DbConfigCheckResult

参数	参数类型	描述
param_name	String	参数名，字符长度限制3~128位。
value	String	参数值，字符长度限制1~64位。
check_result	String	校验结果。 可选范围 <ul style="list-style-type: none">• success• fail

状态码：400

表 4-1078 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1079 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

POST https://{localhost}/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"
}
```

响应示例

状态码：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": [ ]
}
```

状态码：400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CheckDataBaseConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        CheckDataBaseConfigRequest request = new CheckDataBaseConfigRequest();
        request.withInstanceId("{instance_id}");
        DbConfigCheckRequestV3 body = new DbConfigCheckRequestV3();
        TableReplConfig tableReplConfigbody = new TableReplConfig();
        tableReplConfigbody.withReplType(TableReplConfig.ReplTypeEnum.fromValue("include_tables"))
            .withReplScope(TableReplConfig.ReplScopeEnum.fromValue("all"));
    }
}
```

```
List<DbConfig> listbodyDbConfigs = new ArrayList<>();
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("enable_chunk_level_dump")
        .withValue("false")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("snapshot_with_lock")
        .withValue("true")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("sync_commit_interval_ms")
        .withValue("5000")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("max_sync_commit_rows")
        .withValue("500000")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("max_sync_commit_bytes")
        .withValue("268435456")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("max_full_sync_task_threads_num")
        .withValue("1")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("max_rows_per_chunk")
        .withValue("0")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("max_bytes_per_chunk")
        .withValue("268435456")
);
listbodyDbConfigs.add(
    new DbConfig()
        .withParamName("binlog_expire_logs_seconds")
        .withValue("0")
);
body.withTableReplConfig(tableReplConfigbody);
body.withDbConfigs(listbodyDbConfigs);
body.withTargetDatabaseName("target_database_name");
body.withSourceDatabaseName("source_database_name");
body.withSourceNodeId("source_node_id");
body.withSourceInstanceId("source_instance_id");
request.withBody(body);
try {
    CheckDataBaseConfigResponse response = client.checkDataBaseConfig(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```


Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = CheckDataBaseConfigRequest()
        request.instance_id = "{instance_id}"
        tableReplConfigbody = TableReplConfig(
            repl_type="include_tables",
            repl_scope="all"
        )
        listDbConfigsbody = [
            DbConfig(
                param_name="enable_chunk_level_dump",
                value="false"
            ),
            DbConfig(
                param_name="snapshot_with_lock",
                value="true"
            ),
            DbConfig(
                param_name="sync_commit_interval_ms",
                value="5000"
            ),
            DbConfig(
                param_name="max_sync_commit_rows",
                value="500000"
            ),
            DbConfig(
                param_name="max_sync_commit_bytes",
                value="268435456"
            ),
            DbConfig(
                param_name="max_full_sync_task_threads_num",
                value="1"
            ),
            DbConfig(
                param_name="max_rows_per_chunk",
                value="0"
            ),
            DbConfig(
                param_name="max_bytes_per_chunk",
                value="268435456"
            ),
            DbConfig(
                param_name="binlog_expire_logs_seconds",
                value="0"
            )
        ]
```

```
)
]
request.body = DbConfigCheckRequestV3(
    table_repl_config=tableReplConfigbody,
    db_configs=listDbConfigsbody,
    target_database_name="target_database_name",
    source_database_name="source_database_name",
    source_node_id="source_node_id",
    source_instance_id="source_instance_id"
)
response = client.check_data_base_config(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CheckDataBaseConfigRequest{}
    request.InstanceId = "{instance_id}"
    replTypeTableReplConfig:= model.GetTableReplConfigReplTypeEnum().INCLUDE_TABLES
    replScopeTableReplConfig:= model.GetTableReplConfigReplScopeEnum().ALL
    tableReplConfigbody := &model.TableReplConfig{
        ReplType: &replTypeTableReplConfig,
        ReplScope: &replScopeTableReplConfig,
    }
    paramNameDbConfigs:= "enable_chunk_level_dump"
    valueDbConfigs:= "false"
    paramNameDbConfigs1:= "snapshot_with_lock"
    valueDbConfigs1:= "true"
    paramNameDbConfigs2:= "sync_commit_interval_ms"
    valueDbConfigs2:= "5000"
    paramNameDbConfigs3:= "max_sync_commit_rows"
    valueDbConfigs3:= "500000"
    paramNameDbConfigs4:= "max_sync_commit_bytes"
```

```
valueDbConfigs4:= "268435456"
paramNameDbConfigs5:= "max_full_sync_task_threads_num"
valueDbConfigs5:= "1"
paramNameDbConfigs6:= "max_rows_per_chunk"
valueDbConfigs6:= "0"
paramNameDbConfigs7:= "max_bytes_per_chunk"
valueDbConfigs7:= "268435456"
paramNameDbConfigs8:= "binlog_expire_logs_seconds"
valueDbConfigs8:= "0"
var listDbConfigsbody = []model.DbConfig{
    {
        ParamName: &paramNameDbConfigs,
        Value: &valueDbConfigs,
    },
    {
        ParamName: &paramNameDbConfigs1,
        Value: &valueDbConfigs1,
    },
    {
        ParamName: &paramNameDbConfigs2,
        Value: &valueDbConfigs2,
    },
    {
        ParamName: &paramNameDbConfigs3,
        Value: &valueDbConfigs3,
    },
    {
        ParamName: &paramNameDbConfigs4,
        Value: &valueDbConfigs4,
    },
    {
        ParamName: &paramNameDbConfigs5,
        Value: &valueDbConfigs5,
    },
    {
        ParamName: &paramNameDbConfigs6,
        Value: &valueDbConfigs6,
    },
    {
        ParamName: &paramNameDbConfigs7,
        Value: &valueDbConfigs7,
    },
    {
        ParamName: &paramNameDbConfigs8,
        Value: &valueDbConfigs8,
    },
}
targetDatabaseNameDbConfigCheckRequestV3:= "target_database_name"
sourceDatabaseNameDbConfigCheckRequestV3:= "source_database_name"
sourceNodeIdDbConfigCheckRequestV3:= "source_node_id"
sourceInstanceIdDbConfigCheckRequestV3:= "source_instance_id"
request.Body = &model.DbConfigCheckRequestV3{
    TableReplConfig: tableReplConfigbody,
    DbConfigs: &listDbConfigsbody,
    TargetDatabaseName: &targetDatabaseNameDbConfigCheckRequestV3,
    SourceDatabaseName: &sourceDatabaseNameDbConfigCheckRequestV3,
    SourceNodeId: &sourceNodeIdDbConfigCheckRequestV3,
    SourceInstanceId: &sourceInstanceIdDbConfigCheckRequestV3,
}
response, err := client.CheckDataBaseConfig(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.18 查询 StarRocks 数据同步配置信息

功能介绍

查询StarRocks数据同步配置信息。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
configuration

表 4-1080 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

表 4-1081 Query 参数

参数	是否必选	参数类型	描述
task_name	是	String	数据同步任务名。 字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

请求参数

表 4-1082 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1083 响应 Body 参数

参数	参数类型	描述
source_instance_id	String	TaurusDB实例ID。
source_node_id	String	TaurusDB节点ID。
database_info	DataBaseInfo object	TaurusDB数据库配置信息。
table_infos	Array of TableConfigCheckResult objects	表配置信息。
table_repl_config	TableReplConfig object	表同步配置信息。

参数	参数类型	描述
new_table_repl_config	TableReplConfig object	更新的表同步配置信息。
target_database_name	String	目标数据库名。字符长度限制3~128位, 仅支持英文大小写字母、数字以及下划线。
is_tables_change	Boolean	同步任务表是否变化。
last_error_of_alter_table	String	最近一次alter table的异常信息。

表 4-1084 DataBaseInfo

参数	参数类型	描述
database_name	String	数据库名称。
db_config_check_results	Array of DbConfigCheckResult objects	数据库配置检查结果。

表 4-1085 DbConfigCheckResult

参数	参数类型	描述
param_name	String	参数名, 字符长度限制3~128位。
value	String	参数值, 字符长度限制1~64位。
check_result	String	校验结果。 可选范围 <ul style="list-style-type: none">• success• fail

表 4-1086 TableConfigCheckResult

参数	参数类型	描述
table_name	String	表名
table_config	String	表配置项
check_result	String	校验结果, success/failed

表 4-1087 TableReplConfig

参数	参数类型	描述
repl_type	String	表同步类型。include_tables: 白名单, exclude_tables: 黑名单。
repl_scope	String	表同步范围。all: 全量同步, part: 部分同步。
tables	Array of strings	白名单或黑名单的表范围。

状态码: 400

表 4-1088 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1089 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询任务名为taskName的数据同步配置信息。

```
GET https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/configuration?task_name=taskName
```

响应示例

状态码: 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": ""
}
```

状态码: 400

Client error.

```
{
  "error_code": "DBS.200022",
  "error_msg": "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ListStarRocksDataReplicationConfigSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        ListStarRocksDataReplicationConfigRequest request = new
```



```
ListStarRocksDataReplicationConfigRequest();
    request.withInstanceId("{instance_id}");
    try {
        ListStarRocksDataReplicationConfigResponse response =
client.listStarRocksDataReplicationConfig(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ListStarRocksDataReplicationConfigRequest()
        request.instance_id = "{instance_id}"
        response = client.list_star_rocks_data_replication_config(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ListStarRocksDataReplicationConfigRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ListStarRocksDataReplicationConfig(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.19 查询 StarRocks 数据同步的库参数配置

功能介绍

查询StarRocks数据同步的库参数配置。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/
database-parameters

表 4-1090 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释： 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，且长度为32个字符。 默认值： 不涉及。
instance_id	是	String	参数解释： StarRocks实例ID，严格匹配UUID规则。 约束限制： 不涉及。 取值范围： 只能由英文字母、数字组成，后缀为in17，且长度为36个字符。 默认值： 不涉及。

表 4-1091 Query 参数

参数	是否必选	参数类型	描述
add_task_scenario	否	String	<p>参数解释: 新增子任务的场景, 用于区分库参数是否支持修改。</p> <p>约束限制: 非必填。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>
offset	否	String	<p>参数解释: 索引位置, 偏移量。从第一条数据偏移offset条数据后开始查询 (偏移0条数据, 表示从第一条数据开始查询), 必须为数字, 不能为负数。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 0。</p>
limit	否	String	<p>参数解释: 查询记录数。</p> <p>约束限制: 不涉及。</p> <p>取值范围: 不涉及。</p> <p>默认值: 1。</p>
main_task_name	否	String	<p>参数解释: 新增子任务相应的主任务名。</p> <p>约束限制: 非必填。</p> <p>取值范围: 不涉及。</p> <p>默认值: 不涉及。</p>

请求参数

表 4-1092 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释: 用户Token。通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制: 不涉及。 取值范围: 不涉及。 默认值: 不涉及。
X-Language	否	String	参数解释: 请求语言类型。 约束限制: 不涉及。 取值范围: <ul style="list-style-type: none">• en-us• zh-cn 默认值: en-us。

响应参数

状态码: 200

表 4-1093 响应 Body 参数

参数	参数类型	描述
db_parameters	Array of DbParameter objects	库参数信息。

表 4-1094 DbParameter

参数	参数类型	描述
param_name	String	参数名称。
data_type	String	参数类型。
default_value	String	参数默认值。
value_range	String	参数取值范围。
description	String	参数描述。
is_modifiable	String	参数解释: 新增子任务的场景, 用于区分库参数是否支持修改。 约束限制: 不涉及。 取值范围: 不涉及。

状态码: 400

表 4-1095 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1096 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询StarRocks实例instance_id数据同步的库参数配置。

```
GET https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases/replication/database-parameters
```

响应示例

状态码: 200

Success.

```
{
  "db_parameters": [ {
    "param_name": "enable_chunk_level_dump",
    "data_type": "String",
    "default_value": "false",
    "value_range": "true|false",
    "description": "是否启用分片复制",
    "is_modifiable": "Yes"
  }, {
    "param_name": "snapshot_with_lock",
    "data_type": "String",
    "default_value": "true",
    "value_range": "true|false",
    "description": "获取全量快照时是否加锁，默认加锁",
    "is_modifiable": "Yes"
  }, {
    "param_name": "sync_commit_interval_ms",
    "data_type": "Integer",
    "default_value": "5000",
    "value_range": "1000-60000",
    "description": "批量提交超时时间，超时或buffer满就会提交数据",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_sync_commit_rows",
    "data_type": "Integer",
    "default_value": "500000",
    "value_range": "500000-2000000",
    "description": "每次提交最大行数",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_sync_commit_bytes",
    "data_type": "Integer",
    "default_value": "268435456",
    "value_range": "10485760-1610612736",
    "description": "每次提交最大字节数",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_full_sync_task_threads_num",
    "data_type": "Integer",
    "default_value": "1",
    "value_range": "1-2",
    "description": "全量同步线程数",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_rows_per_chunk",
    "data_type": "Integer",
    "default_value": "0",
    "value_range": "0-1000000",
    "description": "每个分片的最大行数",
    "is_modifiable": "Yes"
  }, {
    "param_name": "max_bytes_per_chunk",
    "data_type": "Integer",
    "default_value": "268435456",
    "value_range": "33554432-1073741824",
    "description": "每个分片最大字节数",
    "is_modifiable": "Yes"
  }, {
    "param_name": "binlog_expire_logs_seconds",
    "data_type": "Integer",
    "default_value": "86400",
    "value_range": "0-604800",
    "description": "binlog保留时间，0表示不做限制，且该值要小于等于TaurusDB保留时间。",

```

```
"is_modifiable" : "Yes"  
}]  
}
```

状态码: 400

Client error.

```
{  
  "error_code" : "DBS.200022",  
  "error_msg" : "实例不存在"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListStarRocksDbParametersSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListStarRocksDbParametersRequest request = new ListStarRocksDbParametersRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ListStarRocksDbParametersResponse response = client.listStarRocksDbParameters(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```



```
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListStarRocksDbParametersRequest()  
        request.instance_id = "{instance_id}"  
        response = client.list_star_rocks_db_parameters(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()
```

```
client := gaussdb.NewGaussDBClient(  
    gaussdb.GaussDBClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.ListStarRocksDbParametersRequest{}  
request.InstanceId = "{instance_id}"  
response, err := client.ListStarRocksDbParameters(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.20 查询 StarRocks 数据库

功能介绍

查询StarRocks数据库。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/databases

表 4-1097 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

表 4-1098 Query 参数

参数	是否必选	参数类型	描述
limit	否	String	查询记录数。
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
database_name	否	String	查询的数据库名称，支持模糊搜索。字符长度限制3~128位，仅支持英文大小写字母、数字以及下划线。

请求参数

表 4-1099 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	是	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1100 响应 Body 参数

参数	参数类型	描述
databases	Array of strings	数据库名称。
total_count	Integer	数据库数量。
timestamp	Integer	查询时间戳。

状态码：400

表 4-1101 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1102 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询StarRocks实例instance_id的前10个数据库。

```
GET https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/databases?  
limit=10&offset=1&database_name=
```

响应示例

状态码：200

Success.

```
{  
  "databases": [ "INFORMATION_SCHEMA", "connections_db1_08759", "connections_db1_31465",  
  "default", "information_schema", "system" ],  
  "total_count": 6,  
}
```

```
"timestamp" : 1706257484  
}
```

状态码：400

Client error.

```
{  
  "error_code" : "DBS.200022",  
  "error_msg" : "实例不存在"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ListStarRocksDataBasesSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        ListStarRocksDataBasesRequest request = new ListStarRocksDataBasesRequest();  
        request.withInstanceId("{instance_id}");  
        try {  
            ListStarRocksDataBasesResponse response = client.listStarRocksDataBases(request);  
            System.out.println(response.toString());  
        } catch (ConnectionException e) {  
            e.printStackTrace();  
        } catch (RequestTimeoutException e) {  
            e.printStackTrace();  
        } catch (ServiceResponseException e) {  
            e.printStackTrace();  
            System.out.println(e.getStatusCode());  
            System.out.println(e.getRequestId());  
            System.out.println(e.getErrorCode());  
            System.out.println(e.getErrorMsg());  
        }  
    }  
}
```

```
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = ListStarRocksDataBasesRequest()  
        request.instance_id = "{instance_id}"  
        response = client.list_star_rocks_data_bases(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()
```

```
client := gaussdb.NewGaussDBClient(  
    gaussdb.GaussDBClientBuilder().  
        WithRegion(region.ValueOf("<YOUR REGION>")).  
        WithCredential(auth).  
        Build())  
  
request := &model.ListStarRocksDataBasesRequest{}  
request.InstanceId = "{instance_id}"  
response, err := client.ListStarRocksDataBases(request)  
if err == nil {  
    fmt.Printf("%+v\n", response)  
} else {  
    fmt.Println(err)  
}  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.21 查询数据库账户

功能介绍

查询StarRocks数据库账户。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/users

表 4-1103 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

表 4-1104 Query 参数

参数	是否必选	参数类型	描述
user_name	否	String	数据库账户。
limit	是	Integer	查询记录数，不能为负数，最小值为1，最大值为100。
offset	是	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。

请求参数

表 4-1105 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1106 响应 Body 参数

参数	参数类型	描述
user_details	Array of user_details objects	数据库账户信息。
total_count	Integer	数据库账户数量。

表 4-1107 user_details

参数	参数类型	描述
user_name	String	数据库账户名。
data_bases	Array of strings	已授权数据库。
dml	Integer	DML授权。 <ul style="list-style-type: none">• 0: 读写权限• 1: 只读权限• 2: 只读和设置权限• 3: 读写和设置权限
ddl	Integer	DDL授权。 <ul style="list-style-type: none">• 0: 无DDL权限• 1: 有DDL权限

状态码: 400

表 4-1108 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1109 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询数据库10个账号信息。

```
GET https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
54e42160670e48e789af7075e1efea1fin16/starrocks/users?limit=10
```

响应示例

状态码：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  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ShowStarRocksDatabaseUserSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
```

```
        .build();
        ShowStarRocksDatabaseUserRequest request = new ShowStarRocksDatabaseUserRequest();
        request.withInstanceId("{instance_id}");
        try {
            ShowStarRocksDatabaseUserResponse response = client.showStarRocksDatabaseUser(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowStarRocksDatabaseUserRequest()
        request.instance_id = "{instance_id}"
        response = client.show_star_rocks_database_user(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)
```

```
func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowStarRocksDatabaseUserRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowStarRocksDatabaseUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.22 创建数据库账号

功能介绍

创建StarRocks数据库账号。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/users

表 4-1110 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1111 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1112 请求 Body 参数

参数	是否必选	参数类型	描述
user_name	是	String	数据库账户名。 长度为2-32个字符，必须以小写字母开头，小写字母或数字结尾，可以包含小写字母、数字以及下划线，不能包含其它特殊字符。

参数	是否必选	参数类型	描述
password	是	String	账户密码。 <ul style="list-style-type: none"> 8-32个字符 不能与用户名或倒序的用户名相同 至少包含以下字符中的三种：大写字母、小写字母、数字和特殊字符~!@#%^*_-=+?,
databases	是	Array of strings	数据库列表。
dml	否	Integer	DML权限，默认2。 取值范围： <ul style="list-style-type: none"> 0: 读写权限 1: 只读权限 2: 只读和设置权限 3: 读写和设置权限
ddl	否	Integer	DDL权限，默认0。 取值范围： <ul style="list-style-type: none"> 0: 无DDL权限 1: 有DDL权限

响应参数

状态码：200

表 4-1113 响应 Body 参数

参数	参数类型	描述
result	String	请求结果。

状态码：400

表 4-1114 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1115 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

创建数据库账号。

```
POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/54e42160670e48e789af7075e1efea1fin16/starrocks/users
{
  "user_name" : "user_test",
  "dml" : 2,
  "ddl" : 0,
  "password" : "Rds_1234",
  "databases" : [ "INFORMATION_SCHEMA", "default" ]
}
```

响应示例

状态码：200

Success.

```
{
  "result" : "SUCCESS"
}
```

SDK 代码示例

SDK代码示例如下。

Java

创建数据库账号。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

import java.util.List;
import java.util.ArrayList;

public class CreateStarRocksDatabaseUserSolution {
    public static void main(String[] args) {
```

```
// The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
environment variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running
this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
String ak = System.getenv("CLOUD_SDK_AK");
String sk = System.getenv("CLOUD_SDK_SK");
String projectId = "{project_id}";

ICredential auth = new BasicCredentials()
    .withProjectId(projectId)
    .withAk(ak)
    .withSk(sk);

GaussDBClient client = GaussDBClient.newBuilder()
    .withCredential(auth)
    .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
    .build();
CreateStarRocksDatabaseUserRequest request = new CreateStarRocksDatabaseUserRequest();
request.withInstanceId("{instance_id}");
StarRocksDatabaseUserInfo body = new StarRocksDatabaseUserInfo();
List<String> listbodyDatabases = new ArrayList<>();
listbodyDatabases.add("INFORMATION_SCHEMA");
listbodyDatabases.add("default");
body.withDdl(0);
body.withDml(2);
body.withDatabases(listbodyDatabases);
body.withPassword("Rds_1234");
body.withUserName("user_test");
request.withBody(body);
try {
    CreateStarRocksDatabaseUserResponse response = client.createStarRocksDatabaseUser(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

创建数据库账号。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"
```



```
credentials = BasicCredentials(ak, sk, projectId)

client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = CreateStarRocksDatabaseUserRequest()
    request.instance_id = "{instance_id}"
    listDatabasesbody = [
        "INFORMATION_SCHEMA",
        "default"
    ]
    request.body = StarRocksDatabaseUserInfo(
        ddl=0,
        dml=2,
        databases=listDatabasesbody,
        password="Rds_1234",
        user_name="user_test"
    )
    response = client.create_star_rocks_database_user(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

创建数据库账号。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.CreateStarRocksDatabaseUserRequest{}
    request.InstanceId = "{instance_id}"
    var listDatabasesbody = []string{
        "INFORMATION_SCHEMA",
```

```
        "default",
    }
    ddlStarRocksDatabaseUserInfo:= int32(0)
    dmlStarRocksDatabaseUserInfo:= int32(2)
    request.Body = &model.StarRocksDatabaseUserInfo{
        Ddl: &ddlStarRocksDatabaseUserInfo,
        Dml: &dmlStarRocksDatabaseUserInfo,
        Databases: listDatabasesbody,
        Password: "Rds_1234",
        UserName: "user_test",
    }
    response, err := client.CreateStarRocksDatabaseUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.23 删除数据库账户

功能介绍

删除StarRocks数据库账户。

调用方法

请参见[如何调用API](#)。

URI

DELETE /v3/{project_id}/instances/{instance_id}/starrocks/users

表 4-1116 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

表 4-1117 Query 参数

参数	是否必选	参数类型	描述
user_name	是	String	数据库账户名。

请求参数

表 4-1118 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1119 响应 Body 参数

参数	参数类型	描述
result	String	请求结果。

状态码：400

表 4-1120 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1121 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

删除数据库账户。

```
DELETE https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/54e42160670e48e789af7075e1efea1fin16/starrocks/user?user_name=user_test
```

响应示例

状态码：200

Success.

```
{  
  "result" : "SUCCESS"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class DeleteStarRocksDatabaseUserSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    DeleteStarRocksDatabaseUserRequest request = new DeleteStarRocksDatabaseUserRequest();
    request.withInstanceId("{instance_id}");
    try {
        DeleteStarRocksDatabaseUserResponse response = client.deleteStarRocksDatabaseUser(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = DeleteStarRocksDatabaseUserRequest()
        request.instance_id = "{instance_id}"
```

```
response = client.delete_star_rocks_database_user(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.DeleteStarRocksDatabaseUserRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.DeleteStarRocksDatabaseUser(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

4.15.24 修改数据库账号密码

功能介绍

修改StarRocks数据库账号密码。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/users/password

表 4-1122 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1123 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1124 请求 Body 参数

参数	是否必选	参数类型	描述
user_name	是	String	数据库账号名。
password	是	String	账户密码。 <ul style="list-style-type: none">8-32个字符不能与用户名或倒序的用户名相同至少包含以下字符中的三种：大写字母、小写字母、数字和特殊字符~!@#%^*-_+=?,

响应参数

状态码：200

表 4-1125 响应 Body 参数

参数	参数类型	描述
result	String	请求结果。

状态码：400

表 4-1126 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1127 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

修改数据库账户密码。

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
54e42160670e48e789af7075e1efea1fin16/starrocks/users/password
```

```
{  
  "user_name": "user_test",  
  "password": "Tang_1234"  
}
```

响应示例

状态码: 200

Success.

```
{  
  "result": "SUCCESS"  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.25 修改数据库账号权限

功能介绍

修改StarRocks数据库账号权限。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/users/permission

表 4-1128 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID，严格匹配UUID规则。

请求参数

表 4-1129 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1130 请求 Body 参数

参数	是否必选	参数类型	描述
user_name	是	String	数据库账号名。
databases	否	Array of strings	数据库列表。

参数	是否必选	参数类型	描述
dml	否	Integer	DML权限。 取值范围： <ul style="list-style-type: none">• 0: 读写权限• 1: 只读权限• 2: 只读和设置权限• 3: 读写和设置权限
ddl	否	Integer	DDL权限。 取值范围： <ul style="list-style-type: none">• 0: 无DDL权限• 1: 有DDL权限

响应参数

状态码：200

表 4-1131 响应 Body 参数

参数	参数类型	描述
result	String	请求结果。

状态码：400

表 4-1132 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1133 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

修改数据库账户权限。

```
PUT https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/  
86fd60a5256a4592b957e8e6bb2d1b59in07/starrocks/users/permission  
  
{  
  "user_name": "user_test",  
  "dml": 2,  
  "databases": [ "*" ]  
}
```

响应示例

状态码: 200

Success.

```
{  
  "result": "SUCCESS"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

修改数据库账户权限。

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.List;  
import java.util.ArrayList;  
  
public class UpdateStarRocksDatabaseUserPermissionSolution {  
  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();
```

```
UpdateStarRocksDatabaseUserPermissionRequest request = new
UpdateStarRocksDatabaseUserPermissionRequest();
request.withInstanceId("{instance_id}");
StarRocksDatabaseUserPSinfo body = new StarRocksDatabaseUserPSinfo();
List<String> listbodyDatabases = new ArrayList<>();
listbodyDatabases.add("**");
body.withDml(2);
body.withDatabases(listbodyDatabases);
body.withUserName("user_test");
request.withBody(body);
try {
    UpdateStarRocksDatabaseUserPermissionResponse response =
client.updateStarRocksDatabaseUserPermission(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

修改数据库账户权限。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateStarRocksDatabaseUserPermissionRequest()
        request.instance_id = "{instance_id}"
        listDatabasesbody = [
            "**"
        ]
        request.body = StarRocksDatabaseUserPSinfo(
            dml=2,
            databases=listDatabasesbody,
            user_name="user_test"
        )
        response = client.update_star_rocks_database_user_permission(request)
```

```
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

修改数据库账户权限。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateStarRocksDatabaseUserPermissionRequest{}
    request.InstanceId = "{instance_id}"
    var listDatabasesbody = []string{
        "*",
    }
    dmlStarRocksDatabaseUserPSinfo := int32(2)
    request.Body = &model.StarRocksDatabaseUserPSinfo{
        Dml: &dmlStarRocksDatabaseUserPSinfo,
        Databases: &listDatabasesbody,
        UserName: "user_test",
    }
    response, err := client.UpdateStarRocksDatabaseUserPermission(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.26 StarRocks 实例规格变更

功能介绍

StarRocks实例规格变更。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/resize-flavor

表 4-1134 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	TaurusDB实例ID，严格匹配UUID规则。

请求参数

表 4-1135 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1136 请求 Body 参数

参数	是否必选	参数类型	描述
fe_flavor_id	否	String	FE节点CPU、内存规格ID。填空或者不填视为规格ID与原规格ID保持一致。
be_flavor_id	否	String	BE节点CPU、内存规格ID。填空或者不填视为规格ID与原规格ID保持一致。

响应参数

状态码：200

表 4-1137 响应 Body 参数

参数	参数类型	描述
job_id	String	工作流ID。

状态码：400

表 4-1138 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1139 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
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"  
}
```

响应示例

状态码：200

Success.

```
{  
  "job_id" : "32df2c1d-91c9-4777-8b4a-608030aed64d"  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
public class ResizeStarRocksFlavorSolution {
```

```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    ResizeStarRocksFlavorRequest request = new ResizeStarRocksFlavorRequest();
    request.withInstanceId("{instance_id}");
    SrFlavorResizeReq body = new SrFlavorResizeReq();
    body.withBeFlavorId("c44cfde6-d250-313c-8d7a-cd216f071670");
    body.withFeFlavorId("c44cfde6-d250-313c-8d7a-cd216f071658");
    request.withBody(body);
    try {
        ResizeStarRocksFlavorResponse response = client.resizeStarRocksFlavor(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()
```

```
try:
    request = ResizeStarRocksFlavorRequest()
    request.instance_id = "{instance_id}"
    request.body = SrFlavorResizeReq(
        be_flavor_id="c44cfde6-d250-313c-8d7a-cd216f071670",
        fe_flavor_id="c44cfde6-d250-313c-8d7a-cd216f071658"
    )
    response = client.resize_star_rocks_flavor(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ResizeStarRocksFlavorRequest{
        request.InstanceId = "{instance_id}"
        beFlavorIdSrFlavorResizeReq:= "c44cfde6-d250-313c-8d7a-cd216f071670"
        feFlavorIdSrFlavorResizeReq:= "c44cfde6-d250-313c-8d7a-cd216f071658"
        request.Body = &model.SrFlavorResizeReq{
            BeFlavorId: &beFlavorIdSrFlavorResizeReq,
            FeFlavorId: &feFlavorIdSrFlavorResizeReq,
        }
    }
    response, err := client.ResizeStarRocksFlavor(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.27 查询参数

功能介绍

按节点类型查询参数

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/starrocks/configurations

表 4-1140 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。
instance_id	是	String	实例ID，严格匹配UUID规则。

表 4-1141 Query 参数

参数	是否必选	参数类型	描述
node_type	是	String	节点类型。取值范围： <ul style="list-style-type: none">• be• fe

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 4-1142 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1143 响应 Body 参数

参数	参数类型	描述
configurations	ParameterConfigurationInfo object	参数信息。
total_count	Long	参数信息的总数。
parameter_values	Array of ParameterValuesInfo objects	参数对象。

表 4-1144 ParameterConfigurationInfo

参数	参数类型	描述
datastore_version_name	String	参数解释: 数据库版本名称。 取值范围: 2.0
datastore_name	String	参数解释: 参数组引擎名称。 取值范围: taurus
created	String	参数解释: 参数组创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。
updated	String	参数解释: 参数组更新时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。 其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。 取值范围: 不涉及。

表 4-1145 ParameterValuesInfo

参数	参数类型	描述
name	String	参数解释: 参数名称。 取值范围: 不涉及。
value	String	参数解释: 参数值。 取值范围: 不涉及。

参数	参数类型	描述
restart_required	Boolean	参数解释: 是否需要重启。 取值范围: <ul style="list-style-type: none"> • false: 否。 • true: 是。
readonly	Boolean	参数解释: 是否只读。 取值范围: <ul style="list-style-type: none"> • false: 否。 • true: 是。
value_range	String	参数解释: 参数值范围。 取值范围: 不涉及。
type	String	参数解释: 参数类型。 取值范围: <ul style="list-style-type: none"> • string • integer • boolean • list • float
description	String	参数解释: 参数描述。 取值范围: 不涉及。

状态码: 400

表 4-1146 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1147 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

查询实例be节点参数

```
GET https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/instances/3edf6218dfb442329730765ee02fdd31in17/starrocks/configurations?node_type=be
```

响应示例

状态码：200

参数查询接口返回。

```
{
  "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和auto_increment_offset 用于master-to-master的复制，并可以用来控制AUTO_INCREMENT列的操作。"
    }
  ],
  "total_count": 140
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowStarrocksParamsSolution {
```



```
public static void main(String[] args) {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running
    // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    String ak = System.getenv("CLOUD_SDK_AK");
    String sk = System.getenv("CLOUD_SDK_SK");
    String projectId = "{project_id}";

    ICredential auth = new BasicCredentials()
        .withProjectId(projectId)
        .withAk(ak)
        .withSk(sk);

    GaussDBClient client = GaussDBClient.newBuilder()
        .withCredential(auth)
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
    ShowStarrocksParamsRequest request = new ShowStarrocksParamsRequest();
    request.withInstanceId("{instance_id}");
    try {
        ShowStarrocksParamsResponse response = client.showStarrocksParams(request);
        System.out.println(response.toString());
    } catch (ConnectionException e) {
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = ShowStarrocksParamsRequest()
        request.instance_id = "{instance_id}"
```

```
response = client.show_starrocks_params(request)
print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.ShowStarrocksParamsRequest{}
    request.InstanceId = "{instance_id}"
    response, err := client.ShowStarrocksParams(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	参数查询接口返回。
400	接口报错返回400。

状态码	描述
500	接口报错返回500。

错误码

请参见[错误码](#)。

4.15.28 修改参数

功能介绍

按节点类型修改节点参数

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/starrocks/configurations

表 4-1148 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-1149 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1150 请求 Body 参数

参数	是否必选	参数类型	描述
node_type	是	String	节点类型。取值范围： <ul style="list-style-type: none"> • be • fe
parameter_values	是	Map<String,String>	参数名和参数值映射关系。用户可以基于默认参数模板的参数，自定义的参数值。不传入该参数，则保持原参数信息。

响应参数

状态码：200

表 4-1151 响应 Body 参数

参数	参数类型	描述
job_id	String	修改指定实例参数的任务ID。
restart_required	Boolean	是否需要重启。 true：是。 false：否。

状态码：400

表 4-1152 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1153 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
PUT https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
3ef58db3986540d19f95151309368d34in17/starrocks/configurations  
  
{  
  "parameter_values": {  
    "sync_tablet_meta": "true"  
  },  
  "node_type": "be"  
}
```

响应示例

状态码：200

参数修改返回。

```
{  
  "job_id": "aacd2f81-3fcb-427b-a52e-142639c6d1b9",  
  "restart_required": false  
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;  
  
import com.huaweicloud.sdk.core.auth.ICredential;  
import com.huaweicloud.sdk.core.auth.BasicCredentials;  
import com.huaweicloud.sdk.core.exception.ConnectionException;  
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;  
import com.huaweicloud.sdk.core.exception.ServiceResponseException;  
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;  
import com.huaweicloud.sdk.gaussdb.v3.*;  
import com.huaweicloud.sdk.gaussdb.v3.model.*;  
  
import java.util.Map;  
import java.util.HashMap;  
  
public class UpdateStarrocksParamsSolution {  
    public static void main(String[] args) {  
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great  
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or  
        // environment variables and decrypted during use to ensure security.  
        // In this example, AK and SK are stored in environment variables for authentication. Before running  
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
        String ak = System.getenv("CLOUD_SDK_AK");  
        String sk = System.getenv("CLOUD_SDK_SK");  
        String projectId = "{project_id}";  
  
        ICredential auth = new BasicCredentials()  
            .withProjectId(projectId)  
            .withAk(ak)  
            .withSk(sk);  
  
        GaussDBClient client = GaussDBClient.newBuilder()  
            .withCredential(auth)  
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))  
            .build();  
        UpdateStarrocksParamsRequest request = new UpdateStarrocksParamsRequest();  
        request.withInstanceId("{instance_id}");  
        UpdateParamInfo body = new UpdateParamInfo();
```

```
Map<String, String> listbodyParameterValues = new HashMap<>();
listbodyParameterValues.put("sync_tablet_meta", "true");
body.withParameterValues(listbodyParameterValues);
body.withNodeType("be");
request.withBody(body);
try {
    UpdateStarrocksParamsResponse response = client.updateStarrocksParams(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrorMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateStarrocksParamsRequest()
        request.instance_id = "{instance_id}"
        listParameterValuesbody = {
            "sync_tablet_meta": "true"
        }
        request.body = UpdateParamInfo(
            parameter_values=listParameterValuesbody,
            node_type="be"
        )
        response = client.update_starrocks_params(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/ gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateStarrocksParamsRequest{}
    request.InstanceId = "{instance_id}"
    var listParameterValuesbody = map[string]string{
        "sync_tablet_meta": "true",
    }
    request.Body = &model.UpdateParamInfo{
        ParameterValues: listParameterValuesbody,
        NodeType: "be",
    }
    response, err := client.UpdateStarrocksParams(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	参数修改返回。
400	接口调用失败返回400。
500	接口调用失败返回500。

错误码

请参见[错误码](#)。

4.15.29 StarRocks 实例开启行列分流

功能介绍

StarRocks实例开启行列分流。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/users/sync

表 4-1154 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	StarRocks实例ID。

请求参数

表 4-1155 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1156 请求 Body 参数

参数	是否必选	参数类型	描述
action	是	String	StarRocks账号同步动作。

响应参数

状态码：200

表 4-1157 响应 Body 参数

参数	参数类型	描述
success	String	开启行列分流是否成功。

状态码：400

表 4-1158 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码：500

表 4-1159 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
POST https://{endpoint}/v3/23a50154cf494ec9ad6883979a12db0a/instances/58fab56787854702b20f0e17cdcb49b9in17/starrocks/users/sync
{
  "action" : "startSyncTaurusAccount"
}
```

响应示例

状态码: 200

Success.

```
{
  "success" : true
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class SyncStarRocksUsersSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        SyncStarRocksUsersRequest request = new SyncStarRocksUsersRequest();
        request.withInstanceId("{instance_id}");
        UserSyncReq body = new UserSyncReq();
        body.withAction(UserSyncReq.ActionEnum.fromValue("startSyncTaurusAccount"));
        request.withBody(body);
        try {
            SyncStarRocksUsersResponse response = client.syncStarRocksUsers(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
```

```
        e.printStackTrace();
    } catch (RequestTimeoutException e) {
        e.printStackTrace();
    } catch (ServiceResponseException e) {
        e.printStackTrace();
        System.out.println(e.getHttpStatusCode());
        System.out.println(e.getRequestId());
        System.out.println(e.getErrorCode());
        System.out.println(e.getErrorMsg());
    }
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = SyncStarRocksUsersRequest()
        request.instance_id = "{instance_id}"
        request.body = UserSyncReq(
            action="startSyncTaurusAccount"
        )
        response = client.sync_star_rocks_users(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
```

```
variables and decrypted during use to ensure security.
// In this example, AK and SK are stored in environment variables for authentication. Before running this
example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.SyncStarRocksUsersRequest{}
request.InstanceId = "{instance_id}"
request.Body = &model.UserSyncReq{
    Action: model.GetUserSyncReqActionEnum().START_SYNC_TAURUS_ACCOUNT,
}
response, err := client.SyncStarRocksUsers(request)
if err == nil {
    fmt.Printf("%v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.15.30 参数对比

功能介绍

对比实例参数和默认模板的差异

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/configurations/starrocks/comparison

表 4-1160 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。

请求参数

表 4-1161 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn
Content-Type	是	String	内容类型。取值：application/json。

表 4-1162 请求 Body 参数

参数	是否必选	参数类型	描述
source_configuration_id	是	String	需要进行比较的源参数模板ID。通过ListStarrocksInstanceInfo接口获得。

响应参数

状态码：200

表 4-1163 响应 Body 参数

参数	参数类型	描述
differences	Array of ParamGroupParameterDifferences objects	老本版参数之间区别的集合。

表 4-1164 ParamGroupParameterDifferences

参数	参数类型	描述
parameter_name	String	参数名称。
source_value	String	源参数模板中的参数值。
target_value	String	目标参数模板中的参数值。

状态码: 400

表 4-1165 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

状态码: 500

表 4-1166 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
POST https://{endpoint}/v3/0483b6b16e954cb88930a360d2c4e663/configurations/comparison
{
  "source_configuration_id": "a2069d40256f40078c52d90d6a91ee63pr17",
}
```

响应示例

状态码: 200

参数之间区别的集合。

```
{
  "differences" : [ {
    "parameter_name" : "alter_tablet_worker_count",
    "source_value" : "4",
    "target_value" : "3"
  } ]
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class CheckStarrocksParamsSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        CheckStarrocksParamsRequest request = new CheckStarrocksParamsRequest();
        CheckStarrocksParamsRequestBody body = new CheckStarrocksParamsRequestBody();
        body.withSourceConfigurationId("a2069d40256f40078c52d90d6a91ee63pr17");
        request.withBody(body);
        try {
            CheckStarrocksParamsResponse response = client.checkStarrocksParams(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

```
}  
}
```

Python

```
# coding: utf-8  
  
import os  
from huaweicloudsdkcore.auth.credentials import BasicCredentials  
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion  
from huaweicloudsdkcore.exceptions import exceptions  
from huaweicloudsdkgaussdb.v3 import *  
  
if __name__ == "__main__":  
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    # variables and decrypted during use to ensure security.  
    # In this example, AK and SK are stored in environment variables for authentication. Before running this  
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak = os.environ["CLOUD_SDK_AK"]  
    sk = os.environ["CLOUD_SDK_SK"]  
    projectId = "{project_id}"  
  
    credentials = BasicCredentials(ak, sk, projectId)  
  
    client = GaussDBClient.new_builder() \  
        .with_credentials(credentials) \  
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \  
        .build()  
  
    try:  
        request = CheckStarrocksParamsRequest()  
        request.body = CheckStarrocksParamsRequestBody(  
            source_configuration_id="a2069d40256f40078c52d90d6a91ee63pr17"  
        )  
        response = client.check_starrocks_params(request)  
        print(response)  
    except exceptions.ClientRequestException as e:  
        print(e.status_code)  
        print(e.request_id)  
        print(e.error_code)  
        print(e.error_msg)
```

Go

```
package main  
  
import (  
    "fmt"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"  
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"  
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"  
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"  
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).
```



```
Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.CheckStarrocksParamsRequest{}
request.Body = &model.CheckStarrocksParamsRequestBody{
    SourceConfigurationId: "a2069d40256f40078c52d90d6a91ee63pr17",
}
response, err := client.CheckStarrocksParams(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	参数之间区别的集合。
400	接口调用错误返回400。
500	接口调用错误返回500。

错误码

请参见[错误码](#)。

4.15.31 StarRocks 内核版本升级

功能介绍

StarRocks内核版本升级。

调用方法

请参见[如何调用API](#)。

URI

POST /v3/{project_id}/instances/{instance_id}/starrocks/db-upgrade

表 4-1167 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	参数解释: 租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，且长度为32个字符。 默认值: 不涉及。
instance_id	是	String	参数解释: StarRocks实例ID，严格匹配UUID规则。 约束限制: 不涉及。 取值范围: 只能由英文字母、数字组成，后缀为in17，且长度为36个字符。 默认值: 不涉及。

请求参数

表 4-1168 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	参数解释： 用户Token。通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。 约束限制： 不涉及。 取值范围： 不涉及。 默认值： 不涉及。
X-Language	是	String	参数解释： 请求语言类型。 约束限制： 不涉及。 取值范围： <ul style="list-style-type: none">• en-us• zh-cn 默认值： en-us。
Content-Type	是	String	参数解释： 内容类型。 约束限制： 不涉及。 取值范围： application/json。 默认值： application/json。

表 4-1169 请求 Body 参数

参数	是否必选	参数类型	描述
delay	否	String	参数解释: 是否延时升级。 约束限制: 不涉及 取值范围: <ul style="list-style-type: none"> • true • false 默认取值: false。
is_skip_validate	否	String	参数解释: 是否跳过升级校验。 约束限制: 不涉及 取值范围: <ul style="list-style-type: none"> • true • false 默认取值: false。

响应参数

状态码：200

表 4-1170 响应 Body 参数

参数	参数类型	描述
job_id	String	参数解释: 升级工作流ID。 取值范围: 不涉及。

状态码：400

表 4-1171 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误描述。

状态码：500

表 4-1172 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误描述。

请求示例

```
POST https://{localhost}/v3/{project_id}/instances/{instance_id}/starrocks/db-upgrade
{
  "delay" : false,
  "is_skip_validate" : false
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "job_id"
}
```

状态码：400

Client error.

```
{
  "error_code" : "DBS.200022",
  "error_msg" : "实例不存在"
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
```

```
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpgradeSrKernelVersionSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();

        UpgradeSrKernelVersionRequest request = new UpgradeSrKernelVersionRequest();
        request.withInstanceId("{instance_id}");
        UpgradeSrKernelVersionRequestV3 body = new UpgradeSrKernelVersionRequestV3();
        body.withIsSkipValidate("false");
        body.withDelay("false");
        request.withBody(body);
        try {
            UpgradeSrKernelVersionResponse response = client.upgradeSrKernelVersion(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.getenv("CLOUD_SDK_AK")
    sk = os.getenv("CLOUD_SDK_SK")
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)
```

```
client = GaussDBClient.new_builder() \
    .with_credentials(credentials) \
    .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
    .build()

try:
    request = UpgradeSrKernelVersionRequest()
    request.instance_id = "{instance_id}"
    request.body = UpgradeSrKernelVersionRequestV3(
        is_skip_validate="false",
        delay="false"
    )
    response = client.upgrade_sr_kernel_version(request)
    print(response)
except exceptions.ClientRequestException as e:
    print(e.status_code)
    print(e.request_id)
    print(e.error_code)
    print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    // variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before running this
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpgradeSrKernelVersionRequest{}
    request.InstanceId = "{instance_id}"
    isSkipValidateUpgradeSrKernelVersionRequestV3 := "false"
    delayUpgradeSrKernelVersionRequestV3 := "false"
    request.Body = &model.UpgradeSrKernelVersionRequestV3{
        IsSkipValidate: &isSkipValidateUpgradeSrKernelVersionRequestV3,
        Delay: &delayUpgradeSrKernelVersionRequestV3,
    }
    response, err := client.UpgradeSrKernelVersion(request)
    if err == nil {
        fmt.Printf("%v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.16 多租特性

4.16.1 查询多租特性开关状态

功能介绍

查询多租特性开关状态。

调用方法

请参见[如何调用API](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/multi-tenant

表 4-1173 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-1174 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码：200

表 4-1175 响应 Body 参数

参数	参数类型	描述
multi_tenant_switch	Boolean	实例多租特性开关。 <ul style="list-style-type: none">true:开启false:关闭。

状态码：400

表 4-1176 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1177 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询多租特性开关状态。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant
```

响应示例

状态码: 200

Success.

```
{
  "multi_tenant_switch" : true
}
```

SDK 代码示例

SDK代码示例如下。

Java

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class ShowMultiTenantSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before running
        // this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
```

```
        .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
        .build();
ShowMultiTenantRequest request = new ShowMultiTenantRequest();
request.withInstanceId("{instance_id}");
try {
    ShowMultiTenantResponse response = client.showMultiTenant(request);
    System.out.println(response.toString());
} catch (ConnectionException e) {
    e.printStackTrace();
} catch (RequestTimeoutException e) {
    e.printStackTrace();
} catch (ServiceResponseException e) {
    e.printStackTrace();
    System.out.println(e.getHttpStatusCode());
    System.out.println(e.getRequestId());
    System.out.println(e.getErrorCode());
    System.out.println(e.getErrMsg());
}
}
```

Python

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security
    # risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment
    # variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before running this
    # example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.valueOf("<YOUR REGION>")) \
        .build()

    try:
        request = ShowMultiTenantRequest()
        request.instance_id = "{instance_id}"
        response = client.show_multi_tenant(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

Go

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
```

```
)  
  
func main() {  
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great security  
    // risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or environment  
    // variables and decrypted during use to ensure security.  
    // In this example, AK and SK are stored in environment variables for authentication. Before running this  
    // example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment  
    ak := os.Getenv("CLOUD_SDK_AK")  
    sk := os.Getenv("CLOUD_SDK_SK")  
    projectId := "{project_id}"  
  
    auth := basic.NewCredentialsBuilder().  
        WithAk(ak).  
        WithSk(sk).  
        WithProjectId(projectId).  
        Build()  
  
    client := gaussdb.NewGaussDBClient(  
        gaussdb.GaussDBClientBuilder().  
            WithRegion(region.ValueOf("<YOUR REGION>")).  
            WithCredential(auth).  
            Build())  
  
    request := &model.ShowMultiTenantRequest{}  
    request.InstanceId = "{instance_id}"  
    response, err := client.ShowMultiTenant(request)  
    if err == nil {  
        fmt.Printf("%+v\n", response)  
    } else {  
        fmt.Println(err)  
    }  
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

4.16.2 开启或者关闭多租特性

功能介绍

开启或者关闭多租特性。

调用方法

请参见[如何调用API](#)。

URI

PUT /v3/{project_id}/instances/{instance_id}/multi-tenant

表 4-1178 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 4-1179 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。 取值范围： <ul style="list-style-type: none">en-uszh-cn

表 4-1180 请求 Body 参数

参数	是否必选	参数类型	描述
multi_tenant_switch	是	Boolean	实例多租特性开关。 <ul style="list-style-type: none">true:开启false:关闭。

响应参数

状态码：200

表 4-1181 响应 Body 参数

参数	参数类型	描述
job_id	String	开启/关闭多租特性ID。

状态码：400

表 4-1182 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 4-1183 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

- 开启多租特性。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant
```

```
{  
  "multi_tenant_switch": true  
}
```

- 关闭多租特性。

```
PUT https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/  
af315b8e6aaa41799bd9a31f2de15abcin07/multi-tenant
```

```
{  
  "multi_tenant_switch": false  
}
```

响应示例

状态码：200

Success.

```
{
  "job_id" : "aef6a470-fb63-4d5b-b644-12ead7e019b3"
}
```

SDK 代码示例

SDK代码示例如下。

Java

- 开启多租特性。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateMultiTenantSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateMultiTenantRequest request = new UpdateMultiTenantRequest();
        request.withInstanceId("{instance_id}");
        OperateMultiTenantReq body = new OperateMultiTenantReq();
        body.withMultiTenantSwitch(true);
        request.withBody(body);
        try {
            UpdateMultiTenantResponse response = client.updateMultiTenant(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

- 关闭多租特性。

```
package com.huaweicloud.sdk.test;

import com.huaweicloud.sdk.core.auth.ICredential;
import com.huaweicloud.sdk.core.auth.BasicCredentials;
import com.huaweicloud.sdk.core.exception.ConnectionException;
import com.huaweicloud.sdk.core.exception.RequestTimeoutException;
import com.huaweicloud.sdk.core.exception.ServiceResponseException;
import com.huaweicloud.sdk.gaussdb.v3.region.GaussDBRegion;
import com.huaweicloud.sdk.gaussdb.v3.*;
import com.huaweicloud.sdk.gaussdb.v3.model.*;

public class UpdateMultiTenantSolution {

    public static void main(String[] args) {
        // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
        // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
        // environment variables and decrypted during use to ensure security.
        // In this example, AK and SK are stored in environment variables for authentication. Before
        // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
        // environment
        String ak = System.getenv("CLOUD_SDK_AK");
        String sk = System.getenv("CLOUD_SDK_SK");
        String projectId = "{project_id}";

        ICredential auth = new BasicCredentials()
            .withProjectId(projectId)
            .withAk(ak)
            .withSk(sk);

        GaussDBClient client = GaussDBClient.newBuilder()
            .withCredential(auth)
            .withRegion(GaussDBRegion.valueOf("<YOUR REGION>"))
            .build();
        UpdateMultiTenantRequest request = new UpdateMultiTenantRequest();
        request.withInstanceId("{instance_id}");
        OperateMultiTenantReq body = new OperateMultiTenantReq();
        body.withMultiTenantSwitch(false);
        request.withBody(body);
        try {
            UpdateMultiTenantResponse response = client.updateMultiTenant(request);
            System.out.println(response.toString());
        } catch (ConnectionException e) {
            e.printStackTrace();
        } catch (RequestTimeoutException e) {
            e.printStackTrace();
        } catch (ServiceResponseException e) {
            e.printStackTrace();
            System.out.println(e.getHttpStatusCode());
            System.out.println(e.getRequestId());
            System.out.println(e.getErrorCode());
            System.out.println(e.getErrorMsg());
        }
    }
}
```

Python

- 开启多租特性。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *
```



```
if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateMultiTenantRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateMultiTenantReq(
            multi_tenant_switch=True
        )
        response = client.update_multi_tenant(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
        print(e.error_code)
        print(e.error_msg)
```

- 关闭多租特性。

```
# coding: utf-8

import os
from huaweicloudsdkcore.auth.credentials import BasicCredentials
from huaweicloudsdkgaussdb.v3.region.gaussdb_region import GaussDBRegion
from huaweicloudsdkcore.exceptions import exceptions
from huaweicloudsdkgaussdb.v3 import *

if __name__ == "__main__":
    # The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    # security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    # environment variables and decrypted during use to ensure security.
    # In this example, AK and SK are stored in environment variables for authentication. Before
    # running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    # environment
    ak = os.environ["CLOUD_SDK_AK"]
    sk = os.environ["CLOUD_SDK_SK"]
    projectId = "{project_id}"

    credentials = BasicCredentials(ak, sk, projectId)

    client = GaussDBClient.new_builder() \
        .with_credentials(credentials) \
        .with_region(GaussDBRegion.value_of("<YOUR REGION>")) \
        .build()

    try:
        request = UpdateMultiTenantRequest()
        request.instance_id = "{instance_id}"
        request.body = OperateMultiTenantReq(
            multi_tenant_switch=False
        )
        response = client.update_multi_tenant(request)
        print(response)
    except exceptions.ClientRequestException as e:
        print(e.status_code)
        print(e.request_id)
```

```
print(e.error_code)
print(e.error_msg)
```

Go

- 开启多租特性。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
    // running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local
    // environment
    ak := os.Getenv("CLOUD_SDK_AK")
    sk := os.Getenv("CLOUD_SDK_SK")
    projectId := "{project_id}"

    auth := basic.NewCredentialsBuilder().
        WithAk(ak).
        WithSk(sk).
        WithProjectId(projectId).
        Build()

    client := gaussdb.NewGaussDBClient(
        gaussdb.GaussDBClientBuilder().
            WithRegion(region.ValueOf("<YOUR REGION>")).
            WithCredential(auth).
            Build())

    request := &model.UpdateMultiTenantRequest{}
    request.InstanceId = "{instance_id}"
    request.Body = &model.OperateMultiTenantReq{
        MultiTenantSwitch: true,
    }
    response, err := client.UpdateMultiTenant(request)
    if err == nil {
        fmt.Printf("%+v\n", response)
    } else {
        fmt.Println(err)
    }
}
```

- 关闭多租特性。

```
package main

import (
    "fmt"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/core/auth/basic"
    gaussdb "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3"
    "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/model"
    region "github.com/huaweicloud/huaweicloud-sdk-go-v3/services/gaussdb/v3/region"
)

func main() {
    // The AK and SK used for authentication are hard-coded or stored in plaintext, which has great
    // security risks. It is recommended that the AK and SK be stored in ciphertext in configuration files or
    // environment variables and decrypted during use to ensure security.
    // In this example, AK and SK are stored in environment variables for authentication. Before
```

running this example, set environment variables CLOUD_SDK_AK and CLOUD_SDK_SK in the local environment

```
ak := os.Getenv("CLOUD_SDK_AK")
sk := os.Getenv("CLOUD_SDK_SK")
projectId := "{project_id}"

auth := basic.NewCredentialsBuilder().
    WithAk(ak).
    WithSk(sk).
    WithProjectId(projectId).
    Build()

client := gaussdb.NewGaussDBClient(
    gaussdb.GaussDBClientBuilder().
        WithRegion(region.ValueOf("<YOUR REGION>")).
        WithCredential(auth).
        Build())

request := &model.UpdateMultiTenantRequest{
    request.InstanceId = "{instance_id}"
    request.Body = &model.OperateMultiTenantReq{
        MultiTenantSwitch: false,
    }
}
response, err := client.UpdateMultiTenant(request)
if err == nil {
    fmt.Printf("%+v\n", response)
} else {
    fmt.Println(err)
}
}
```

更多

更多编程语言的SDK代码示例，请参见[API Explorer](#)的代码示例页签，可生成自动对应的SDK代码示例。

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5 API (即将下线)

5.1 查询数据库引擎的版本

5.1.1 查询数据库引擎的版本

功能介绍

获取指定数据库引擎对应的数据库版本信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询数据库引擎的版本](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/datastores/{database_name}

表 5-1 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
database_name	是	String	数据库引擎。支持的引擎如下，不区分大小写：gaussdb-mysql

请求参数

表 5-2 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-3 响应 Body 参数

参数	参数类型	描述
datastores	Array of MysqlEngineVersionInfo objects	数据库版本信息列表。

表 5-4 MysqlEngineVersionInfo

参数	参数类型	描述
id	String	数据库版本ID，该字段不会有重复。
name	String	数据库版本号，只返回两位数的大版本号。
kernel_version	String	数据库内核版本号，返回完整的四位版本号。
version	String	兼容的开源数据库版本号，返回三位开源版本号。

状态码： 400

表 5-5 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-6 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/datastores/gaussdb-mysql
```

响应示例

状态码： 200

Success.

```
{  
  "datastores": [{  
    "id": "87620726-6802-46c0-9028-a8785e1f1921",  
    "name": "8.0",  
    "kernel_version": "2.0.51.240300",  
    "version": "8.0.22"  
  }]  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.2 查询数据库规格

5.2.1 查询数据库规格

功能介绍

获取指定数据库引擎版本对应的规格信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询数据库规格](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/flavors/{database_name}

表 5-7 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
database_name	是	String	数据库引擎名称。

表 5-8 Query 参数

参数	是否必选	参数类型	描述
version_name	否	String	数据库版本号，目前仅支持兼容MySQL 8.0。
availability_zone_mode	是	String	规格的可用区模式，现在仅支持"single"、"multi"，不区分大小写。
spec_code	否	String	规格编码。

请求参数

表 5-9 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-10 响应 Body 参数

参数	参数类型	描述
flavors	Array of MysqlFlavorsInfo objects	实例规格信息列表

表 5-11 MysqlFlavorsInfo

参数	参数类型	描述
vcpus	String	CPU大小。例如：1表示1U。
ram	String	内存大小，单位为GB。
type	String	规格类型，取值为arm和x86。
id	String	规格ID，该字段唯一
spec_code	String	资源规格编码，同创建指定的flavor_ref。例如：gaussdb.mysql.xlarge.x86.4。
version_name	String	数据库版本号。
instance_mode	String	实例类型。目前仅支持Cluster。

参数	参数类型	描述
az_status	Map<String,String>	规格所在az的状态，包含以下状态： <ul style="list-style-type: none"> • normal，在售 • unsupported，暂不支持该规格 • sellout，售罄。

状态码： 400

表 5-12 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-13 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/flavors/gaussdb-mysql?
version_name=8.0&spec_code=gaussdb.mysql.xlarge.x86.4&availability_zone_mode=single
```

响应示例

状态码： 200

Success.

```
{
  "flavors": [ {
    "type": "x86",
    "vcpus": "1",
    "ram": "4",
    "id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
    "spec_code": "gaussdb.mysql.xlarge.x86.4",
    "instance_mode": "Cluster",
    "version_name": "8.0",
    "az_status": {
      "cn-north-4a": "normal",
      "cn-north-4b": "normal"
    }
  }
}
```

```
    }  
  }  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3 实例管理

5.3.1 创建数据库实例

功能介绍

创建云数据库 TaurusDB实例。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[创建数据库实例](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances

表 5-14 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 5-15 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-16 请求 Body 参数

参数	是否必选	参数类型	描述
charge_info	否	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。说明：DeC专属云账号不支持创建包周期。
region	是	String	区域ID。
name	是	String	实例名称。用于表示实例的名称，同一租户下，同类型的实例名可重名。 取值范围：最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。
datastore	是	MysqlDatastore object	数据库信息。
mode	是	String	实例类型，目前仅支持Cluster。

参数	是否必选	参数类型	描述
flavor_ref	是	String	规格码。使用可参考查询数据库规格响应消息表5中的“spec_code”。
vpc_id	是	String	虚拟私有云ID，获取方法如下： <ul style="list-style-type: none">• 方法1：登录虚拟私有云服务的控制台界面，在虚拟私有云的详情页面查找VPC ID。• 方法2：通过虚拟私有云服务的API接口查询，具体操作可参考查询VPC列表。
subnet_id	是	String	子网的网络ID，获取方法如下： <ul style="list-style-type: none">• 方法1：登录虚拟私有云服务的控制台界面，单击VPC下的子网，进入子网详情页面，查找网络ID。• 方法2：通过虚拟私有云服务的API接口查询，具体操作可参考查询子网列表。
security_group_id	否	String	安全组ID。如果实例所选用的子网开启网络ACL进行访问控制，则该参数非必选。如果未开启ACL进行访问控制，则该参数必选。
configuration_id	否	String	参数模板ID。
password	是	String	数据库密码。取值范围：至少包含以下字符的三种：大小写字母、数字和特殊符号 .!@#\$%^*_-=+?,()&，长度8~32个字符。建议您输入高强度密码，以提高安全性，防止出现密码被暴力破解等安全风险。如果您输入弱密码，系统会自动判定密码非法。
backup_strategy	否	MysqlBackup Strategy object	自动备份策略
time_zone	否	String	时区。
availability_zone_mode	是	String	可用区类型,单可用区Single或多可用区multi。
master_availability_zone	否	String	主可用区。

参数	是否必选	参数类型	描述
slave_count	是	Integer	备节点个数。单次接口调用最多支持创建9个备节点。
volume	否	MysqlVolume object	volume信息。创建包周期实例可选。
tags	否	Array of MysqlTags objects	标签列表，根据标签键值对创建实例。 <ul style="list-style-type: none">• {key}表示标签键，不可以为空或重复。• {value}表示标签值，可以为空。 如果创建实例时同时使用多个标签键值对，中间使用逗号分隔，最多包含10组。
enterprise_project_id	否	String	企业项目ID。如果账户开通企业项目服务则该参数必选，未开启该参数不可选。
dedicated_resource_id	否	String	专属资源池ID，只有开通专属资源池后才可以下发此参数。

表 5-17 MysqlChargeInfo

参数	是否必选	参数类型	描述
charge_mode	是	String	计费模式。 取值范围： <ul style="list-style-type: none">• prePaid: 预付费，即包年/包月。• postPaid: 后付费，即按需付费。 枚举值： <ul style="list-style-type: none">• prePaid• postPaid

参数	是否必选	参数类型	描述
period_type	否	String	<p>订购周期类型。</p> <p>取值范围：</p> <ul style="list-style-type: none"> • month：包月。 • year：包年。 <p>说明：“charge_mode”为“prePaid”时生效，且为必选值。</p> <p>枚举值：</p> <ul style="list-style-type: none"> • month • year
period_num	否	Integer	<p>“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。</p> <p>取值范围：</p> <p>当“period_type”为“month”时，取值为1~9。当“period_type”为“year”时，取值为1~3。</p>
is_auto_renew	否	String	<p>创建包周期实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。</p> <ul style="list-style-type: none"> • true，为自动续订。 • false，为不自动续订，默认该方式。 <p>枚举值：</p> <ul style="list-style-type: none"> • true • false
is_auto_pay	否	String	<p>创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。</p> <ul style="list-style-type: none"> • true，为自动支付，默认该方式。 • false，为手动支付。 <p>枚举值：</p> <ul style="list-style-type: none"> • true • false

表 5-18 MysqlDatastore

参数	是否必选	参数类型	描述
type	是	String	数据库引擎，现在只支持 gaussdb-mysql
version	是	String	数据库版本。 数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。
kernel_version	否	String	内核数据库版本。如果需要指定具体的内核版本，请联系客服人员添加白名单。 完整的四位内核数据库版本，获取方法请参见查询数据库引擎的版本返回的kernel_version字段。

表 5-19 MysqlBackupStrategy

参数	是否必选	参数类型	描述
start_time	是	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为 hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	否	String	自动备份保留天数，取值范围：1-732

表 5-20 MysqlVolume

参数	是否必选	参数类型	描述
size	是	String	磁盘大小。默认值为10，单位GB。取值范围：10~128000，必须为10的整数倍。

表 5-21 MysqlTags

参数	是否必选	参数类型	描述
key	是	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。字符集：A-Z，a-z，0-9，‘-’，‘_’，UNICODE字符（\u4E00-\u9FFF）。
value	是	String	标签值。最大长度43个unicode字符。可以为空字符串。字符集：A-Z，a-z，0-9，‘.’，‘-’，‘_’，UNICODE字符（\u4E00-\u9FFF）。

响应参数

状态码： 201

表 5-22 响应 Body 参数

参数	参数类型	描述
instance	MysqlInstanceResponse object	实例信息
job_id	String	实例创建的任务id。 仅创建按需实例时会返回该参数。
order_id	String	订单号，创建包年包月时返回该参数。

表 5-23 MysqlInstanceResponse

参数	参数类型	描述
id	String	实例ID。
name	String	实例名称。用于表示实例的名称，同一租户下，同类型的实例名称可相同。取值范围：4~64个字符之间，必须以字母开头，不区分大小写，可以包含字母、数字、中划线或者下划线，不能包含其它的特殊字符。
status	String	实例状态。
datastore	MysqlDatastore object	数据库信息。
mode	String	实例类型，仅支持Cluster。

参数	参数类型	描述
configuration_id	String	参数组ID。
port	String	数据库端口信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略
enterprise_project_id	String	企业项目ID。
region	String	区域ID，与请求参数相同。
availability_zone_mode	String	可用区模式，与请求参数相同。
master_availability_zone	String	主可用区ID。
vpc_id	String	虚拟私有云ID，与请求参数相同。
security_group_id	String	安全组ID，与请求参数相同。
subnet_id	String	子网ID，与请求参数相同。
flavor_ref	String	规格码，与请求参数相同。
charge_info	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。

表 5-24 MysqlDatastore

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql
version	String	数据库版本。 数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。
kernel_version	String	内核数据库版本。如果需要指定具体的内核版本，请联系客服人员添加白名单。

表 5-25 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732

表 5-26 MysqlChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： <ul style="list-style-type: none">prePaid：预付费，即包年/包月。postPaid：后付费，即按需付费。 枚举值： <ul style="list-style-type: none">prePaidpostPaid
period_type	String	订购周期类型。 取值范围： <ul style="list-style-type: none">month：包月。year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。 枚举值： <ul style="list-style-type: none">monthyear
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： 当“period_type”为“month”时，取值为1~9。当“period_type”为“year”时，取值为1~3。

参数	参数类型	描述
is_auto_renew	String	创建包周期实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none">• true，为自动续订。• false，为不自动续订，默认该方式。 枚举值： <ul style="list-style-type: none">• true• false
is_auto_pay	String	创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none">• true，为自动支付，默认该方式。• false，为手动支付。 枚举值： <ul style="list-style-type: none">• true• false

状态码： 400

表 5-27 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-28 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建实例

```
POST https://{endpoint}/mysql/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.large.x86.4",
"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" : "Hu2wei@13",
"backup_strategy" : {
  "start_time" : "08:00-09:00"
},
"availability_zone_mode" : "single",
"slave_count" : 1,
"enterprise_project_id" : 0
}
```

响应示例

状态码： 201

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",
      "kernel_version" : "2.0.51.240300"
    },
    "mode" : "Cluster",
    "port" : "3306",
    "enterprise_project_id" : "0",
    "flavor_ref" : "gaussdb.mysql.large.x86.4",
    "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",
    "slave_count" : 1
  },
  "job_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"
}
```

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.2 查询实例列表

功能介绍

根据指定条件查询实例列表。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询实例列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances

表 5-29 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-30 Query 参数

参数	是否必选	参数类型	描述
id	否	String	实例ID。“ ”为系统保留字符，如果id是以“ ”起始，表示按照“ ”后面的值模糊匹配，否则，按照id精确匹配查询。不能只传入“ ”。
name	否	String	实例名称。“ ”为系统保留字符，如果name是以“ ”起始，表示按照“ ”后面的值模糊匹配，否则，按照name精确匹配查询。不能只传入“ ”。
type	否	String	按照实例类型查询。目前仅支持Cluster。
datastore_type	否	String	数据库类型，现在只支持gaussdb-mysql。
vpc_id	否	String	虚拟私有云ID。
subnet_id	否	String	子网的网络ID信息。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

请求参数

表 5-31 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-32 响应 Body 参数

参数	参数类型	描述
instances	Array of MysqlInstanceListInfo objects	实例列表信息。
total_count	Integer	总记录数。

表 5-33 MysqlInstanceListInfo

参数	参数类型	描述
id	String	实例ID。
name	String	创建的实例名称。

参数	参数类型	描述
status	String	实例状态。 取值： <ul style="list-style-type: none"> ● BUILD：表示实例正在创建。 ● ACTIVE：表示实例正常。 ● FAILED：表示实例创建失败。 ● FROZEN：表示实例冻结。 ● MODIFYING：表示实例正在扩容。 ● REBOOTING：表示实例正在重启。 ● RESTORING：表示实例正在恢复。 ● SWITCHOVER：表示实例正在主备切换。 ● MIGRATING：表示实例正在迁移。 ● BACKING UP：表示实例正在进行备份。 ● MODIFYING DATABASE PORT：表示实例正在修改数据库端口。 ● STORAGE FULL：表示实例磁盘空间满。
private_ips	Array of strings	实例写内网IP地址列表。弹性云服务器创建成功后该值存在，其他情况下为空字符串。
public_ips	Array of strings	实例外网IP地址列表。
port	String	数据库端口号。
type	String	实例类型，取值为“Cluster”。
region	String	实例所在区域。
datastore	MysqlDatastore object	数据库信息。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
updated	String	更新时间，格式与"created"字段对应格式完全相同。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。

参数	参数类型	描述
flavor_ref	String	规格码。
flavor_info	MysqlFlavorInfo object	flavor规格信息。
volume	MysqlVolumeInfo object	存储盘信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
charge_info	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。

表 5-34 MysqlDatastore

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql
version	String	数据库版本。 数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。

表 5-35 MysqlFlavorInfo

参数	参数类型	描述
vcpus	String	CPU核数。
ram	String	内存大小，单位GB。

表 5-36 MysqlVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
size	String	已使用磁盘大小，单位GB。

表 5-37 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732

表 5-38 MysqlChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： <ul style="list-style-type: none">prePaid：预付费，即包年/包月。postPaid：后付费，即按需付费。 枚举值： <ul style="list-style-type: none">prePaidpostPaid
period_type	String	订购周期类型。 取值范围： <ul style="list-style-type: none">month：包月。year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。 枚举值： <ul style="list-style-type: none">monthyear
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： 当“period_type”为“month”时，取值为1~9。当“period_type”为“year”时，取值为1~3。

参数	参数类型	描述
is_auto_renew	String	创建包周期实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none">• true，为自动续订。• false，为不自动续订，默认该方式。 枚举值： <ul style="list-style-type: none">• true• false
is_auto_pay	String	创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none">• true，为自动支付，默认该方式。• false，为手动支付。 枚举值： <ul style="list-style-type: none">• true• false

状态码： 400

表 5-39 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-40 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例列表

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances?
id=ed7cc6166ec24360a5ed5c5c9c2ed726in01&name=hy&type=Cluster&datastore_type=gaussdb-
```

```
mysql&vpc_id=19e5d45d-70fd-4a91-87e9-  
b27e71c9891f&subnet_id=bd51fb45-2dcb-4296-8783-8623bfe89bb7&offset=0&limit=10
```

响应示例

状态码: 200

Success.

```
{  
  "instances": [ {  
    "id": "d738399de028480fabb2b8120d4e01a4in07",  
    "status": "ACTIVE",  
    "name": "gaussdb-mysql-instance01",  
  
    "private_ips": ["192.168.100.136"],  
    "readonly_private_ips": ["192.168.100.78","192.168.100.147"],  
    "proxy_ips": ["192.168.100.83"],  
    "port": "3306",  
    "type": "Cluster",  
    "private_ips": [ "192.168.0.142" ],  
    "db_user_name": "root",  
    "region": "cn-north-4",  
    "datastore": {  
      "type": "gaussdb-mysql",  
      "version": "8.0",  
      "kernel_version": "2.0.54.240600"  
    },  
    "created": "2018-08-20T02:33:49_0800",  
    "updated": "2018-08-20T02:33:49_0800",  
    "volume": {  
      "type": "POOL",  
      "used_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": [ ],  
    "dedicated_resource_id": ""  
  } ],  
  "total_count": 1  
}
```

状态码

状态码	描述
200	Success.
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

5.3.3 查询实例列表

功能介绍

根据指定条件查询实例列表。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询实例列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /v3/{project_id}/instances

表 5-41 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-42 Query 参数

参数	是否必选	参数类型	描述
id	否	String	实例ID。“*”为系统保留字符，如果id是以“*”起始，表示按照“*”后面的值模糊匹配，否则，按照id精确匹配查询。不能只传入“*”。

参数	是否必选	参数类型	描述
name	否	String	实例名称。 “*”为系统保留字符，如果name是以“*”起始，表示按照“*”后面的值模糊匹配，否则，按照name精确匹配查询。不能只传入“*”。
type	否	String	按照实例类型查询。目前仅支持Cluster。
datastore_type	否	String	数据库类型，现在只支持gaussdb-mysql。
vpc_id	否	String	虚拟私有云ID。
subnet_id	否	String	子网的网络ID信息。
private_ip	否	String	读写内网IP地址。
readonly_private_ip	否	String	读内网IP地址。
proxy_ip	否	String	读写分离IP地址。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。
tags	否	String	根据实例标签键值对进行查询。 <ul style="list-style-type: none">• {key}表示标签键。• {value}表示标签值。 如果同时使用多个标签键值对进行查询，中间使用逗号分隔开，表示查询同时包含指定标签键值对的实例。key不能重复，key之间是与的关系。

请求参数

表 5-43 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码： 200

表 5-44 响应 Body 参数

参数	参数类型	描述
instances	Array of MysqlInstanceListInfo objects	实例列表信息。
total_count	Integer	总记录数。

表 5-45 MysqlInstanceListInfo

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	创建的实例名称。

参数	参数类型	描述
status	String	实例状态。 取值： <ul style="list-style-type: none"> ● BUILD：表示实例正在创建。 ● ACTIVE：表示实例正常。 ● FAILED：表示实例创建失败。 ● FROZEN：表示实例冻结。 ● MODIFYING：表示实例正在扩容。 ● REBOOTING：表示实例正在重启。 ● RESTORING：表示实例正在恢复。 ● SWITCHOVER：表示实例正在主备切换。 ● MIGRATING：表示实例正在迁移。 ● BACKING UP：表示实例正在进行备份。 ● MODIFYING DATABASE PORT：表示实例正在修改数据库端口。 ● STORAGE FULL：表示实例磁盘空间满。
private_ips	Array of strings	实例写内网IP地址列表。弹性云服务器创建成功后该值存在，其他情况下为空字符串。
proxy_ips	Array of strings	实例读写分离IP地址列表。TaurusDB实例开启代理成功后该值存在，其他情况下为空列表。
readonly_private_ips	Array of strings	实例读内网IP地址列表。弹性云服务器创建成功后该值存在，其他情况下为空列表。
public_ips	Array of strings	实例外网IP地址列表。
port	String	数据库端口号。
type	String	实例类型，取值为“Cluster”。
region	String	实例所在区域。
datastore	MySQLDatastoreWithKernelVersion object	数据库信息。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
db_username	String	默认用户名。

参数	参数类型	描述
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
flavor_ref	String	规格码。
flavor_info	MysqlFlavorInfo object	flavor规格信息。
volume	MysqlVolumeInfo object	存储盘信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
charge_info	MysqlChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
tags	Array of InstanceTagItem objects	标签列表。

表 5-46 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 5-47 MysqlFlavorInfo

参数	参数类型	描述
vcpus	String	CPU核数。
ram	String	内存大小，单位GB。

表 5-48 MysqlVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
size	String	已使用磁盘大小，单位GB。

表 5-49 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 5-50 MysqlChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。 取值范围： <ul style="list-style-type: none">prePaid：预付费，即包年/包月。postPaid：后付费，即按需付费。 枚举值： <ul style="list-style-type: none">prePaidpostPaid
period_type	String	订购周期类型。 取值范围： <ul style="list-style-type: none">month：包月。year：包年。 说明：“charge_mode”为“prePaid”时生效，且为必选值。 枚举值： <ul style="list-style-type: none">monthyear

参数	参数类型	描述
period_num	Integer	“charge_mode”为“prePaid”时生效，且为必选值，指定订购的时间。 取值范围： <ul style="list-style-type: none">“period_type”为“month”时，取值为1~9。“period_type”为“year”时，取值为1~3。
is_auto_renew	String	创建包年/包月实例时可指定，表示是否自动续订，续订的周期和原周期相同，且续订时会自动支付。 <ul style="list-style-type: none">true：为自动续订。false：为不自动续订，默认该方式。
is_auto_pay	String	创建包年/包月实例时可指定，表示是否自动从客户的帐户中支付，此字段不影响自动续订的支付方式。 <ul style="list-style-type: none">true：为自动支付，默认该方式。false：为手动支付。

表 5-51 InstanceTagItem

参数	参数类型	描述
key	String	标签键。
value	String	标签值。

状态码：400

表 5-52 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码：500

表 5-53 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

查询TaurusDB实例列表，读写内网IP地址是192.168.0.142。

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/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=192.168.0.142&offset=
0&limit=10&tags=taurusKey1=value1
```

响应示例

状态码： 200

Success.

```
{
  "instances": [ {
    "id": "61a4ea66210545909d74a05c27a7179ein07",
    "status": "ACTIVE",
    "name": "gaussdb-mysql-instance01",

    "private_ips": [ "192.168.0.142" ],
    "readonly_private_ips": [ "192.168.0.228", "192.168.0.165" ],
    "proxy_ips": [ "192.168.0.15" ],
    "port": 3306,
    "type": "Cluster",
    "db_user_name": "root",
    "region": "cn-north-4",
    "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": "taurusKey1",
```

```
"value": "value1"
}],
"dedicated_resource_id": ""
}],
"total_count": 1
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.4 删除实例

功能介绍

删除数据库实例，不支持删除包周期实例。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[删除实例](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

DELETE /mysql/v3/{project_id}/instances/{instance_id}

表 5-54 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-55 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-56 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。
order_id	String	订单ID。

状态码： 400

表 5-57 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-58 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
DELETE https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin01
```

响应示例

状态码: 200

Server error.

```
{  
  "job_id": "04efe8e2-9255-44ae-a98b-d87cae411890",  
  "order_id": null  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.5 查询实例详情信息

功能介绍

查询实例详情信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询实例详情信息](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}

表 5-59 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID。

请求参数

表 5-60 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-61 响应 Body 参数

参数	参数类型	描述
instance	MysqlInstanceInfoDetail object	实例信息。

表 5-62 MysqlInstanceInfoDetail

参数	参数类型	描述
id	String	实例ID。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。
status	String	实例状态。 取值： <ul style="list-style-type: none">● BUILD：表示实例正在创建。● ACTIVE：表示实例正常。● FAILED：表示实例创建失败。● FROZEN：表示实例冻结。● MODIFYING：表示实例正在扩容。● REBOOTING：表示实例正在重启。● RESTORING：表示实例正在恢复。● SWITCHOVER：表示实例正在主备切换。● MIGRATING：表示实例正在迁移。● BACKING UP：表示实例正在进行备份。● MODIFYING DATABASE PORT：表示实例正在修改数据库端口。● STORAGE FULL：表示实例磁盘空间满。
port	String	数据库端口号。
type	String	实例类型，取值为“Cluster”。
node_count	Integer	节点个数。
datastore	MysqlDatastore object	数据库信息。
backup_used_space	Number	备份空间使用大小，单位为GB。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
updated	String	更新时间，格式与"created"字段对应格式完全相同。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
private_write_ips	Array of strings	实例的写内网IP。
public_ips	String	实例的公网IP。

参数	参数类型	描述
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
configuration_id	String	实例创建的模板ID, 或者应用到实例的最新参数组模板ID。
volume	MysqlVolumeInfo object	存储盘信息。
backup_strategy	MysqlBackupStrategy object	自动备份策略
nodes	Array of MysqlInstanceNodeInfo objects	节点信息。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
az_mode	String	可用区模式, 单可用区single或多可用区multi。
master_az_code	String	主可用区。
maintenance_window	String	可维护时间窗, 为UTC时间。
tags	Array of MysqlTags objects	实例标签。
dedicated_resource_id	String	专属资源池ID, 只有数据库实例属于专属资源池才会返回该参数。

表 5-63 MysqlDatastore

参数	参数类型	描述
type	String	数据库引擎, 现在只支持gaussdb-mysql

参数	参数类型	描述
version	String	数据库版本。 数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。
kernel_version	String	数据库内核版本。

表 5-64 MysqlVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
size	String	已使用磁盘大小，单位GB。

表 5-65 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数。

表 5-66 MysqlInstanceNodeInfo

参数	参数类型	描述
id	String	实例ID。
name	String	节点名称。
type	String	节点类型，master或slave。
status	String	节点状态。
port	Integer	数据库端口号。
private_read_ips	Array of strings	节点的读内网地址。
volume	MysqlVolumeInfo object	存储盘信息。

参数	参数类型	描述
az_code	String	可用区。
region_code	String	实例所在的区域。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
updated	String	更新时间，格式与"created"字段对应格式完全相同。说明：创建时返回值为空，数据库实例创建成功后该值不为空。
flavor_ref	String	规格码。
max_connections	String	允许的最大连接数。
vcpus	String	CPU核数。
ram	String	内存大小，单位为GB。
need_restart	Boolean	是否需要重启使修改的参数生效。
priotiry	Integer	主备倒换优先级。

表 5-67 MysqlTags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。字符集：A-Z，a-z，0-9，'-'，'_'，UNICODE字符（\u4E00-\u9FFF）。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。字符集：A-Z，a-z，0-9，'.'，'-'，'_'，UNICODE字符（\u4E00-\u9FFF）。

状态码： 400

表 5-68 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-69 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询实例详情信息

```
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/instances/  
436aaafb689c4250a9a5bb33cb271e8cin07
```

响应示例

状态码: 200

Success.

```
{  
  "instance": {  
    "id": "d738399de028480fabb2b8120d4e01a4in07",  
    "name": "gaussdb-mysql-instance01",  
    "project_id": "3cedfc54-b105-4652-a4e0-847b11576628",  
    "status": "ACTIVE",  
    "port": 3306,  
    "type": "Cluster",  
    "node_count": 2,  
    "backup_used_space": 20,  
    "private_write_ips": [ "192.168.0.142" ],  
    "public_ips": [ "10.154.219.187" ],  
    "db_user_name": "root",  
    "datastore": {  
      "type": "gaussdb-mysql",  
      "version": "8.0.22",  
      "kernel_version": "2.0.48.231200"  
    },  
    "created": "2018-08-20T02:33:49+0800",  
    "updated": "2018-08-20T02:33:49+0800",  
    "volume": {  
      "type": "POOL",  
      "used_size": 100  
    },  
    "vpc_id": "3cedfc54-b105-4652-a4e0-847b11576b58",  
    "subnet_id": "c1cfa53c-65d3-431e-8552-326bf310c7ad",  
    "security_group_id": "fc577a1a-f202-424a-977f-24faec3fdd55",  
    "configuration_id": "3cedfc54-b105-4652-a4e0-24faec3fdd23",  
    "backup_strategy": {  
      "start_time": "19:00-20:00",  
      "keep_days": 7  
    },  
    "enterprise_project_id": 0,  
    "time_zone": "UTC+08:00",  
    "az_mode": "single",  
    "master_az_code": "cn-north-4b",  
    "maintenance_window": "18:00-22:00",  
    "nodes": [ {  
      "id": "799a0f2fa49a4151bf9f7063c1fbba36no07",  
      "name": "gauss-d616-lb07_node01",
```

```
{
  "type": "master",
  "status": "normal",
  "port": 3306,
  "private_read_ips": [ "192.168.0.163" ],
  "volume": {
    "type": "POOL",
    "used": 0.0
  },
  "az_code": "cn-north-4b",
  "region_code": "cn-north-4",
  "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref": "taurus.large.4",
  "max_connections": null,
  "vcpus": 1,
  "ram": 4,
  "need_restart": false,
  "priority": 1
}, {
  "id": "799a0f2fa49a4151bf9f7063c1fbba35no07",
  "name": "gauss-d616-lb07_node02",
  "type": "slave",
  "status": "normal",
  "port": 3306,
  "private_read_ips": [ "192.168.0.162" ],
  "volume": {
    "type": "POOL",
    "used": 0.0
  },
  "az_code": "cn-north-4b",
  "region_code": "cn-north-4",
  "flavor_id": "3169caaf-6c2f-41d5-aadd-c8fc3d83597e",
  "flavor_ref": "taurus.large.4",
  "max_connections": null,
  "vcpus": 1,
  "ram": 4,
  "need_restart": false,
  "priority": 1
}]
}
```

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.6 查询实例详情信息

功能介绍

查询实例详情信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询实例详情信息](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /v3/{project_id}/instances/{instance_id}

表 5-70 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-71 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-72 响应 Body 参数

参数	参数类型	描述
instance	MysqlInstanceInfoDetail object	实例信息。

表 5-73 MysqlInstanceInfoDetail

参数	参数类型	描述
id	String	实例ID, 严格匹配UUID规则。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。
status	String	实例状态。 取值： <ul style="list-style-type: none">● BUILD: 表示实例正在创建。● ACTIVE: 表示实例正常。● FAILED: 表示实例创建失败。● FROZEN: 表示实例冻结。● MODIFYING: 表示实例正在扩容。● REBOOTING: 表示实例正在重启。● RESTORING: 表示实例正在恢复。● SWITCHOVER: 表示实例正在主备切换。● MIGRATING: 表示实例正在迁移。● BACKING UP: 表示实例正在进行备份。● MODIFYING DATABASE PORT: 表示实例正在修改数据库端口。● STORAGE FULL: 表示实例磁盘空间满。
port	String	数据库端口号。
alias	String	实例备注
type	String	实例类型, 取Cluster”。
charge_info	MysqlInstanceChargeInfo object	计费类型信息, 支持包年包月和按需, 默认为按需。
node_count	Integer	节点个数。

参数	参数类型	描述
datastore	MysqlDatastoreWithKernelVersion object	数据库信息。
backup_used_space	Double	备份空间使用大小，单位为GB。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
private_write_ips	Array of strings	实例的写内网IP地址。
private_dns_names	Array of strings	实例内网域名列表。实例创建成功后，需要手动申请内网域名，否则查询内网域名为空。
public_ips	String	实例的公网IP地址。
db_username	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
configuration_id	String	实例创建的模板ID，或者应用到实例的最新参数组模板ID。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
nodes	Array of MysqlInstanceNodeInfo objects	节点信息。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
az_mode	String	可用区模式。 取值范围： <ul style="list-style-type: none">• single: 单可用区。• multi: 多可用区。

参数	参数类型	描述
master_az_code	String	主可用区。
maintenance_window	String	可维护时间窗，为UTC时间。
tags	Array of MysqlTags objects	实例标签。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
proxies	Array of MysqlProxyInfo objects	数据库代理信息。

表 5-74 MysqlInstanceChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。
order_id	String	订单号。仅包年包月返回。

表 5-75 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 5-76 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 5-77 MysqlInstanceNodeInfo

参数	参数类型	描述
id	String	实例ID, 严格匹配UUID规则。
name	String	节点名称。
type	String	节点类型。 取值范围: <ul style="list-style-type: none">• master: 主节点。• slave: 只读节点。
status	String	节点状态。
port	Integer	数据库端口号。
private_read_ips	Array of strings	节点的读内网地址。
volume	MysqlInstanceNodeVolumeInfo object	存储盘信息。
az_code	String	可用区。
region_code	String	实例所在的区域。
created	String	创建时间, 格式为"yyyy-mm-ddThh:mm:ssZ"。其中, T指某个时间的开始; Z指时区偏移量, 例如偏移1个小时显示为+0100。
updated	String	更新时间, 格式与"created"字段对应格式完全相同。
flavor_id	String	规格ID。
flavor_ref	String	规格码。
max_connections	String	允许的最大连接数。
vcpus	String	CPU核数。
ram	String	内存大小, 单位为GB。
need_restart	Boolean	是否需要重启使修改的参数生效。
priority	Integer	主备倒换优先级。

表 5-78 MysqlInstanceNodeVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。

参数	参数类型	描述
used	String	已使用磁盘大小, 单位GB。
size	Long	包年/包月实例购买的存储空间大小, 单位GB。

表 5-79 MysqlTags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串, 不能为空格。 字符集: A-Z, a-z, 0-9, '-', '_', UNICOD字符 (\u4E00-\u9FFF)。
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集: A-Z, a-z, 0-9, '.', '-', '_', UNICOD字符 (\u4E00-\u9FFF)。

表 5-80 MysqlProxyInfo

参数	参数类型	描述
pool_id	String	数据库代理ID。
name	String	数据库代理名称。
address	String	Proxy读写分离地址。

状态码: 400

表 5-81 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-82 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

查询指定实例的详细信息。

```
GET https://{endpoint}/v3/3cedfc54-b105-4652-a4e0-847b11576628/instances/  
d738399de028480fabb2b8120d4e01a4in07
```

响应示例

状态码： 200

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-a4e0-847b11576b58",  
    "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": "ACTIVE",  
      "port": 3306,  
      "private_read_ips": [ "192.168.0.163" ],  
      "volume": {  
        "type": "POOL",
```

```
    "used" : 0.07
  },
  "az_code" : "cn-north-4b",
  "region_code" : "cn-north-4",
  "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" : "ACTIVE",
  "port" : 3306,
  "private_read_ips" : [ "192.168.0.162" ],
  "volume" : {
    "type" : "POOL",
    "used" : 0.07
  },
  "az_code" : "cn-north-4b",
  "region_code" : "cn-north-4",
  "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" : "cn-north-4b",
"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"
} ]
}
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.7 批量查询实例详情

功能介绍

批量查询实例详情。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[批量查询实例详情](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /v3/{project_id}/instances/details

表 5-83 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-84 Query 参数

参数	是否必选	参数类型	描述
instance_ids	是	String	实例ID，严格匹配UUID规则。 最多同时输入20个实例ID，用英文逗号分隔。

请求参数

表 5-85 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-86 响应 Body 参数

参数	参数类型	描述
instances	Array of MysqlInstanceInfoDetail objects	实例详情。

表 5-87 MysqlInstanceInfoDetail

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	创建的实例名称。
project_id	String	租户在某一Region下的project ID。

参数	参数类型	描述
status	String	实例状态。 取值： <ul style="list-style-type: none">● BUILD：表示实例正在创建。● ACTIVE：表示实例正常。● FAILED：表示实例创建失败。● FROZEN：表示实例冻结。● MODIFYING：表示实例正在扩容。● REBOOTING：表示实例正在重启。● RESTORING：表示实例正在恢复。● SWITCHOVER：表示实例正在主备切换。● MIGRATING：表示实例正在迁移。● BACKING UP：表示实例正在进行备份。● MODIFYING DATABASE PORT：表示实例正在修改数据库端口。● STORAGE FULL：表示实例磁盘空间满。
port	String	数据库端口号。
alias	String	实例备注
type	String	实例类型，取“Cluster”。
charge_info	MysqlInstanceChargeInfo object	计费类型信息，支持包年包月和按需，默认为按需。
node_count	Integer	节点个数。
datastore	MysqlDatastoreWithKernelVersion object	数据库信息。
backup_used_space	Double	备份空间使用大小，单位为GB。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
private_write_ips	Array of strings	实例的写内网IP地址。
private_dns_names	Array of strings	实例内网域名列表。实例创建成功后，需要手动申请内网域名，否则查询内网域名为空。

参数	参数类型	描述
public_ips	String	实例的公网IP地址。
db_user_name	String	默认用户名。
vpc_id	String	虚拟私有云ID。
subnet_id	String	子网的网络ID信息。
security_group_id	String	安全组ID。
configuration_id	String	实例创建的模板ID，或者应用到实例的最新参数组模板ID。
backup_strategy	MysqlBackupStrategy object	自动备份策略。
nodes	Array of MysqlInstanceNodeInfo objects	节点信息。
enterprise_project_id	String	企业项目ID。
time_zone	String	时区。
az_mode	String	可用区模式。 取值范围： <ul style="list-style-type: none">• single: 单可用区。• multi: 多可用区。
master_az_code	String	主可用区。
maintenance_window	String	可维护时间窗，为UTC时间。
tags	Array of MysqlTags objects	实例标签。
dedicated_resource_id	String	专属资源池ID，只有数据库实例属于专属资源池才会返回该参数。
proxies	Array of MysqlProxyInfo objects	数据库代理信息。

表 5-88 MysqlInstanceChargeInfo

参数	参数类型	描述
charge_mode	String	计费模式。
order_id	String	订单号。仅包年包月返回。

表 5-89 MysqlDatastoreWithKernelVersion

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql。
version	String	数据库版本。
kernel_version	String	数据库内核版本。

表 5-90 MysqlBackupStrategy

参数	参数类型	描述
start_time	String	自动备份开始时间段。自动备份将在该时间一个小时内触发。 取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。 1. HH取值必须比hh大1。 2. mm和MM取值必须相同，且取值必须为00。
keep_days	String	自动备份保留天数，取值范围：1-732。

表 5-91 MysqlInstanceNodeInfo

参数	参数类型	描述
id	String	实例ID，严格匹配UUID规则。
name	String	节点名称。
type	String	节点类型。 取值范围： <ul style="list-style-type: none">• master：主节点。• slave：只读节点。
status	String	节点状态。
port	Integer	数据库端口号。

参数	参数类型	描述
private_read_ips	Array of strings	节点的读内网地址。
volume	MysqlInstanceNodeVolumeInfo object	存储盘信息。
az_code	String	可用区。
region_code	String	实例所在的区域。
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
updated	String	更新时间，格式与"created"字段对应格式完全相同。
flavor_id	String	规格ID。
flavor_ref	String	规格码。
max_connections	String	允许的最大连接数。
vcpus	String	CPU核数。
ram	String	内存大小，单位为GB。
need_restart	Boolean	是否需要重启使修改的参数生效。
priority	Integer	主备倒换优先级。

表 5-92 MysqlInstanceNodeVolumeInfo

参数	参数类型	描述
type	String	磁盘类型。
used	String	已使用磁盘大小，单位GB。
size	Long	包年/包月实例购买的存储空间大小，单位GB。

表 5-93 MysqlTags

参数	参数类型	描述
key	String	标签键。最大长度36个unicode字符。key不能为空或者空字符串，不能为空格。 字符集：A-Z，a-z，0-9，'-'，'_'， UNICODE字符（\u4E00-\u9FFF）。

参数	参数类型	描述
value	String	标签值。最大长度43个unicode字符。可以为空字符串。 字符集：A-Z, a-z, 0-9, '.', '-', '_', UNICODE字符 (\u4E00-\u9FFF)。

表 5-94 MysqlProxyInfo

参数	参数类型	描述
pool_id	String	数据库代理ID。
name	String	数据库代理名称。
address	String	Proxy读写分离地址。

状态码： 400

表 5-95 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-96 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

批量查询实例信息。

```
GET https://{endpoint}/v3/97b026aa9cc4417888c14c84a1ad9860/instances/details?  
instance_ids=11684a0e59e94bceba7880d58cfb07b5in07
```

响应示例

状态码： 200

Success.

```
{
  "instances": [ {
    "id": "11684a0e59e94bceba7880d58cfb07b5in07",
    "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-a4e0-847b11576b58",
  "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": "ACTIVE",
    "port": 3306,
    "private_read_ips": [ "192.168.0.163" ],
    "volume": {
      "type": "POOL",
      "used": 0.07
    },
  },
  "az_code": "cn-north-4b",
  "region_code": "cn-north-4",
  "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": "ACTIVE",
    "port": 3306,
    "private_read_ips": [ "192.168.0.162" ],
    "volume": {
      "type": "POOL",
      "used": 0.07
    },
  },
  "az_code": "cn-north-4b",
```

```
"region_code": "cn-north-4",
"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": "cn-north-4b",
"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"
}]
}]
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.8 创建只读节点

功能介绍

创建只读节点。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[创建只读节点](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/nodes/enlarge

表 5-97 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-98 请求 Header 参数

参数	是否必选	参数类型	描述
x-auth-token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-99 请求 Body 参数

参数	是否必选	参数类型	描述
priorities	是	Array of integers	指定创建的只读节点故障倒换优先级。倒换优先级列表个数即为只读节点格式。故障倒换优先级的取值范围为1~16，数字越小，优先级越大，即故障倒换时，主节点会优先倒换到优先级高的备节点上，优先级相同的备节点选为主节点的概率相同。

参数	是否必选	参数类型	描述
is_auto_pay	否	String	<p>创建包周期时可指定，表示是否自动从客户的账户中支付，此字段不影响自动续订的支付方式。</p> <ul style="list-style-type: none"> • true，为自动支付，默认该方式。 • false，为手动支付。 <p>枚举值：</p> <ul style="list-style-type: none"> • true • false

响应参数

状态码： 201

表 5-100 响应 Body 参数

参数	参数类型	描述
instance_id	String	实例ID。
node_names	Array of strings	节点名称列表。
job_id	String	实例创建的任务id。 仅创建按需实例时会返回该参数。
order_id	String	订单号，创建包年包月时返回该参数。

状态码： 400

表 5-101 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-102 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建只读节点

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/nodes/enlarge
```

```
{  
  "priorities": [ 1, 2 ]  
}
```

响应示例

状态码: 201

Success.

```
{  
  "instance_id": "f381d0b539e644df8f5b0d3a62129515in07",  
  "node_names": [  
    "gauss-ccf5_node03",  
    "gauss-ccf5_node04"  
  ],  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.9 删除只读节点

功能介绍

删除实例的只读节点。多可用区模式删除只读节点时，要保证删除后，剩余的只读节点和主节点在不同的可用区中，否则无法删除该只读节点。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[删除只读节点](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

DELETE /mysql/v3/{project_id}/instances/{instance_id}/nodes/{node_id}

表 5-103 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。
node_id	是	String	节点ID，严格匹配UUID规则。

请求参数

表 5-104 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-105 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。
order_id	String	订单ID。

状态码： 400

表 5-106 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-107 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
DELETE https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin01/nodes/ss62c18799854a919bab633874c159dfin55
```

响应示例

状态码： 500

Server error.

```
{  
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890",  
  "order_id": null  
}
```

状态码

状态码	描述
200	Success.
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

5.3.10 包周期存储扩容

功能介绍

包周期存储扩容。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[包周期存储扩容](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/volume/extend

表 5-108 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-109 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-110 请求 Body 参数

参数	是否必选	参数类型	描述
size	是	Integer	扩容后的容量，每次扩容最小容量为10GB，实例所选容量大小必须为10的整数倍
is_auto_pay	否	String	表示是否自动从客户的账户中支付。 <ul style="list-style-type: none">true，为自动支付，默认该方式。false，为手动支付。 枚举值： <ul style="list-style-type: none">truefalse

响应参数

状态码： 200

表 5-111 响应 Body 参数

参数	参数类型	描述
size	Integer	扩容后容量。
order_id	String	订单号。

状态码： 400

表 5-112 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-113 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

包周期存储扩容

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/volume/extend
```

```
{  
  "size" : 50  
}
```

响应示例

状态码： 200

Success.

```
{  
  "size" : 50,  
  "order_id" : "dff1d289-4d03-4942-8b9f-463ea07c000d"  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.11 修改实例名称

功能介绍

修改实例名称。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[修改实例名称](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

PUT /mysql/v3/{project_id}/instances/{instance_id}/name

表 5-114 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-115 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> en-us zh-cn

表 5-116 请求 Body 参数

参数	是否必选	参数类型	描述
name	是	String	实例名称。长度最小为4个字符，最大为64个字符且不超过64个字节（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中划线、下划线或中文，不能包含其他特殊字符。

响应参数

状态码： 200

表 5-117 响应 Body 参数

参数	参数类型	描述
job_id	String	修改实例名称的任务id

状态码： 400

表 5-118 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-119 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改实例名称

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/name
```

```
{  
  "name": "gaussdb-name"  
}
```

响应示例

状态码: 200

Success.

```
{  
  "job_id": "0f6b6a9e-bd39-4e95-9374-e4d134e5a3d1"  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.12 重置数据库密码

功能介绍

重置数据库密码。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[重置数据库密码](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/password

表 5-120 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-121 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-122 请求 Body 参数

参数	是否必选	参数类型	描述
password	是	String	数据库密码。取值范围：至少包含以下字符的三种：大写字母、小写字母、数字和特殊符号 ~!@#\$%^*_-=+?,()&, 长度8~32个字符。建议您输入高强度密码，以提高安全性，防止出现密码被暴力破解等安全风险。如果您输入弱密码，系统会自动判定密码非法。

响应参数

状态码： 400

表 5-123 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-124 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

重置数据库密码

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/password  
  
{  
  "password" : "Test_345612"  
}
```

响应示例

无

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.3.13 变更实例规格

功能介绍

变更数据库实例的规格。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[变更实例规格](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/action

表 5-125 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-126 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-127 请求 Body 参数

参数	是否必选	参数类型	描述
resize_flavor	是	MysqlResizeFlavor object	规格变更信息。
is_auto_pay	否	String	变更包周期实例规格时可指定，表示是否自动从客户的账户中支付。true，为自动支付，默认该方式。false，为手动支付。

表 5-128 MysqlResizeFlavor

参数	是否必选	参数类型	描述
spec_code	是	String	规格码

响应参数

状态码： 200

表 5-129 响应 Body 参数

参数	参数类型	描述
job_id	String	规格变更的任务id, 仅变更按需实例时会返回该参数
order_id	String	订单id, 仅变更包周期实例时会返回该参数

状态码: 400

表 5-130 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-131 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

变更实例规格

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/action
```

```
{  
  "resize_flavor": {  
    "spec_code": "gaussdb.mysql.large.x86.normal4"  
  }  
}
```

响应示例

```
{  
  "job_id": "dff1d289-4d03-4942-8b9f-463ea07c000d",  
  "order_id": null  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.4 备份管理

5.4.1 设置同区备份策略

功能介绍

修改备份策略。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[设置备份策略](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

PUT /mysql/v3/{project_id}/instances/{instance_id}/backups/policy/update

表 5-132 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-133 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-134 请求 Body 参数

参数	是否必选	参数类型	描述
backup_policy	是	MysqlBackup Policy object	数据库信息。

表 5-135 MysqlBackupPolicy

参数	是否必选	参数类型	描述
start_time	是	String	备份时间段。自动备份将在该时间段内触发。取值范围：非空，格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。HH取值必须比hh大1。mm和MM取值必须相同，且取值必须为00。取值示例：21:00-22:00
keep_days	是	Integer	备份文件的保留天数。
period	是	String	备份周期配置。自动备份将在每星期指定的天进行。取值范围：格式为逗号隔开的数字，数字代表星期。取值示例：1,2,3,4则表示备份周期配置为星期一、星期二、星期三和星期四。
retention_num_backup_level1	否	Integer	1级备份保留数量，默认值为0。当一级备份开关开启时，该参数值有效。取值：0或1

响应参数

状态码： 200

表 5-136 响应 Body 参数

参数	参数类型	描述
status	String	状态信息
instance_id	String	实例ID
instance_name	String	实例名称

状态码： 400

表 5-137 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-138 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

修改备份策略

```
PUT https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
ba62a0b83a1b42bfab275829d86ac0fdin07/backups/policy/update
```

```
{  
  "backup_policy" : {  
    "keep_days" : 7,  
    "start_time" : "19:00-20:00",  
    "period" : "1,2,3,4,5"  
  }  
}
```

响应示例

状态码: 200

Success.

```
{
  "status": "COMPLETED",
  "instance_id": "ef25188419f941309882d2986b2210b9in07",
  "instance_name": "gauss-mysql"
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.4.2 创建手动备份

功能介绍

创建手动备份。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[创建手动备份](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/backups/create

表 5-139 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 5-140 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-141 请求 Body 参数

参数	是否必选	参数类型	描述
instance_id	是	String	实例ID，严格匹配UUID规则。
name	是	String	备份名称。取值范围：4~64个字符之间，（注意：一个中文字符占用3个字节），必须以字母或中文开头，区分大小写，可以包含字母、数字、中文、中划线或下划线，不能包含其他特殊字符。
description	否	String	备份描述，不能包含>!<"&'=特殊字符和回车，不大于256个字符。

响应参数

状态码： 201

表 5-142 响应 Body 参数

参数	参数类型	描述
backup	backup object	备份信息。

参数	参数类型	描述
job_id	String	工作流ID。

表 5-143 backup

参数	参数类型	描述
id	String	备份ID
name	String	备份名称。
descriprion	String	备份描述。
begin_time	String	备份开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”，其中T指时间字段的开始；Z指时区偏移量。
status	Object	备份状态 枚举值： <ul style="list-style-type: none"> ● BUILDING：备份中。 ● COMPLETED：备份完成。 ● FAILED：备份失败。 ● AVAILABLE：备份可用。
type	Object	备份类型，取值： 枚举值： <ul style="list-style-type: none"> ● manual：手动全量备份。
instance_id	String	实例ID。

状态码： 400

表 5-144 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-145 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

创建手动备份

POST https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/backups/create

```
{
  "instance_id": "ef25188419f941309882d2986b2210b9in07",
  "name": "backup-01",
  "description": "create backup"
}
```

响应示例

状态码: 201

Success.

```
{
  "backup": {
    "id": "2f4ddb93-b901-4b08-93d8-1d2e472f30fe",
    "name": "backup-1",
    "description": "手动备份",
    "begin_time": "2020-07-07T01:17:05+0800",
    "status": "BUILDING",
    "type": "manual",
    "instance_id": "ef25188419f941309882d2986b2210b9in07"
  }
  "job_id": "e08bbfc8-1ac5-6721-b9e9-7dd685c6bdd7"
}
```

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.4.3 查询备份列表

功能介绍

查询备份列表。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询备份列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/backups

表 5-146 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-147 Query 参数

参数	是否必选	参数类型	描述
instance_id	否	String	实例ID。
backup_id	否	String	备份ID。
backup_type	否	String	备份类型，取值："auto"：自动全量备份 "manual"：手动全量备份
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。
limit	否	String	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

参数	是否必选	参数类型	描述
begin_time	否	String	查询开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_time	否	String	查询结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”，且大于查询开始时间。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。

请求参数

表 5-148 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码： 200

表 5-149 响应 Body 参数

参数	参数类型	描述
backups	Array of backups objects	备份信息。
total_count	Number	备份文件的总数。

表 5-150 backups

参数	参数类型	描述
id	String	备份ID。
name	String	备份名称。
begin_time	String	备份开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_time	String	备份结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
status	Object	备份状态 枚举值： <ul style="list-style-type: none">● BUILDING：备份中。● COMPLETED：备份完成。● FAILED：备份失败。● AVAILABLE：备份可用。
take_up_time	Integer	备份花费时间(单位：minutes)
type	Object	备份类型 枚举值： <ul style="list-style-type: none">● auto：自动全量备份。● manual：手动全量备份。
size	Number	备份大小，(单位：MB)
datastore	MysqlDatastore object	数据库信息。
instance_id	String	实例ID。
backup_level	Object	备份级别。当开启一级备份开关时，返回该参数。 枚举值： <ul style="list-style-type: none">● 0：备份正在创建中或者备份失败。● 1：一级备份。● 2：二级备份。
description	String	备份文件描述信息

表 5-151 MysqlDatastore

参数	参数类型	描述
type	String	数据库引擎，现在只支持gaussdb-mysql
version	String	数据库版本。 数据库支持的详细版本信息，可调用查询数据库引擎的版本接口获取。

状态码： 400

表 5-152 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-153 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/97b026aa9cc4417888c14c84a1ad9860/backups?instance_id=43e4feaab48f11e89039fa163ebaa7e4br01&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
```

响应示例

状态码： 200

Success.

```
{
  "backups": [ {
    "id": "1fe4feaab48f11e6654hfa163eba87e4b66u",
    "name": "GaussDBforMySQL-gauss-e747-20200705185048266",
    "begin_time": "2018-08-06T12:41:14+0800",
    "end_time": "2018-08-06T12:43:14+0800",
    "take_up_time": 2,
    "status": "COMPLETED",
    "type": "auto",
    "size": 2803,
```

```
"datastore" : {  
  "type" : "GaussDB(for MySQL )",  
  "version" : "8.0"  
},  
"instance_id" : "43e4feaab48f11e89039fa163ebaa7e4br01",  
"backup_level" : "2"  
}],  
"total_count" : 1  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.4.4 查询自动备份策略

功能介绍

查询自动备份策略。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询自动备份策略](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}/backups/policy

表 5-154 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-155 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-156 响应 Body 参数

参数	参数类型	描述
backup_policy	BackupPolicy object	备份策略信息。

表 5-157 BackupPolicy

参数	参数类型	描述
keep_days	Integer	指定已生成的备份文件可以保存的天数。取值范围：1~732，您也可以联系客服将最大保留天数调整为3660。 最小值：1 最大值：732
start_time	String	备份时间段。自动备份将在该时间段内触发。取值范围：格式必须为hh:mm-HH:MM且有效，当前时间指UTC时间。
period	String	备份周期配置。自动备份将在每星期指定的天进行。取值范围：格式为逗号隔开的数字，数字代表星期。

参数	参数类型	描述
retention_num_backup_level1	Integer	一级备份保留数量。当一级备份开关开启时，返回此参数。

状态码： 400

表 5-158 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-159 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/e73893ef73754465a8bd2e0857bbf13ein07/backups/policy
```

响应示例

状态码： 200

Success.

```
{  
  "backup_policy": {  
    "start_time": "19:00-20:00",  
    "keep_days": "7",  
    "period": "1,2",  
    "retention_num_backup_level1": 1  
  }  
}
```

状态码

状态码	描述
200	Success.

状态码	描述
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.5 参数模板管理

5.5.1 查询参数模板

功能介绍

获取参数模板列表，包括所有数据库的默认参数模板和用户创建的参数模板。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询参数模板](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/configurations

表 5-160 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 5-161 请求 Header 参数

参数	是否必选	参数类型	描述
x-auth-token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-162 响应 Body 参数

参数	参数类型	描述
configurations	Array of ConfigurationSummary objects	参数模板信息。
total_count	Integer	参数模板的总数。

表 5-163 ConfigurationSummary

参数	参数类型	描述
id	String	参数组ID。
name	String	参数组名称。
description	String	参数组描述。
datastore_version_name	String	引擎版本。
datastore_name	String	引擎名。

参数	参数类型	描述
created	String	创建时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
updated	String	更新时间，格式为"yyyy-MM-ddTHH:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
user_defined	Boolean	是否是用户自定义参数模板： <ul style="list-style-type: none">• false，表示为系统默认参数模板。• true，表示为用户自定义参数模板。

状态码： 400

表 5-164 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-165 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/configurations
```

响应示例

状态码： 200

Success.

```
{  
  "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  
}]  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.6 配额管理

5.6.1 查询租户的实例配额

功能介绍

获取指定租户的资源配额。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询租户的实例配额](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/project-quotas

表 5-166 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-167 Query 参数

参数	是否必选	参数类型	描述
type	否	String	根据type过滤查询指定类型的配额。 取值范围：instance 枚举值： instance

请求参数

表 5-168 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-169 响应 Body 参数

参数	参数类型	描述
quotas	project-quotas object	租户实例配额信息。

表 5-170 project-quotas

参数	参数类型	描述
resources	Array of resource objects	资源列表对象。

表 5-171 resource

参数	参数类型	描述
mode	String	资源类型。 • cluster: 表示集群版实例的配额 枚举值: • cluster
type	String	指定类型的配额。 • instance: 表示实例的配额 枚举值: • instance
used	Integer	已创建的资源个数。
quota	Integer	资源最大的配额数。

状态码: 400

表 5-172 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-173 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/quotas?type=instance
```

响应示例

状态码: 200

Success.

```
{
  "quotas": [
    {
      "resources": [
        {
          "type": "instance",
          "used": "4",
          "quota": 50,
          "mode": "cluster"
        }
      ]
    }
  ]
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.6.2 查询租户基于企业项目的资源配额

功能介绍

获取指定企业项目的资源配额。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询租户基于企业项目的资源配额](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

```
GET /mysql/v3/{project_id}/quotas
```

表 5-174 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-175 Query 参数

参数	是否必选	参数类型	描述
offset	否	String	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数。取值范围：0 - 10000
limit	否	String	查询记录数。默认为10，不能为负数，最小值为1，最大值为100。
enterprise_project_name	否	String	企业项目名称。

请求参数

表 5-176 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
Content-Type	是	String	内容类型。 取值：application/json。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-177 响应 Body 参数

参数	参数类型	描述
quota_list	Array of quota objects	资源列表对象。
total_count	Integer	配额记录的条数。

表 5-178 quota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。
enterprise_project_name	String	企业项目名称。
instance_quota	Integer	实例个数配额。
vcpus_quota	Integer	CPU核数配额。
ram_quota	Integer	内存使用配额，单位为GB。
availability_instance_quota	Integer	实例剩余配额。
availability_vcpus_quota	Integer	CPU核数剩余配额。
availability_ram_quota	Integer	内存剩余配额。

状态码： 400

表 5-179 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-180 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/quotas

响应示例

状态码: 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
  } ]
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.6.3 设置租户基于企业项目的资源配额

功能介绍

设置指定企业项目的资源配额。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[设置租户基于企业项目的资源配额](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/quotas

表 5-181 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 5-182 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-183 请求 Body 参数

参数	是否必选	参数类型	描述
quota_list	是	Array of setQuota objects	资源列表对象。

表 5-184 setQuota

参数	是否必选	参数类型	描述
enterprise_project_id	是	String	企业项目ID。
instance_quota	是	Integer	实例个数配额。取值范围0~1000。(如果已经存在实例,应该大于已经存在的实例个数)
vcpus_quota	是	Integer	CPU核数配额。取值范围0~3600000。(如果已经存在实例,应该大于已经占用的cpu个数)
ram_quota	是	Integer	内存使用配额,单位为GB。取值范围0~19200000。(如果已经存在实例,应该大于已经占用的内存数)

响应参数

状态码: 200

表 5-185 响应 Body 参数

参数	参数类型	描述
quota_list	Array of setQuota objects	资源列表对象。

表 5-186 setQuota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。
instance_quota	Integer	实例个数配额。取值范围0~1000。(如果已经存在实例,应该大于已经存在的实例个数)
vcpus_quota	Integer	CPU核数配额。取值范围0~3600000。(如果已经存在实例,应该大于已经占用的cpu个数)
ram_quota	Integer	内存使用配额,单位为GB。取值范围0~19200000。(如果已经存在实例,应该大于已经占用的内存数)

请求示例

无

响应示例

状态码: 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpu_quota": 20,
    "ram_quota": 40
  } ]
}
```

状态码

状态码	描述
200	Success.

错误码

请参见[错误码](#)。

5.6.4 修改租户基于企业项目的资源配额

功能介绍

修改指定企业项目的资源配额。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[修改租户基于企业项目的资源配额](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

PUT /mysql/v3/{project_id}/quotas

表 5-187 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

请求参数

表 5-188 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-189 请求 Body 参数

参数	是否必选	参数类型	描述
quota_list	是	Array of setQuota objects	资源列表对象。

表 5-190 setQuota

参数	是否必选	参数类型	描述
enterprise_project_id	是	String	企业项目ID。
instance_quota	是	Integer	实例个数配额。取值范围0~1000。(如果已经存在实例,应该大于已经存在的实例个数)

参数	是否必选	参数类型	描述
vcpus_quota	是	Integer	CPU核数配额。取值范围0~3600000。(如果已经存在实例, 应该大于已经占用的cpu个数)
ram_quota	是	Integer	内存使用配额, 单位为GB。取值范围0~19200000。(如果已经存在实例, 应该大于已经占用的内存数)

响应参数

状态码: 200

表 5-191 响应 Body 参数

参数	参数类型	描述
quota_list	Array of setQuota objects	资源列表对象。

表 5-192 setQuota

参数	参数类型	描述
enterprise_project_id	String	企业项目ID。
instance_quota	Integer	实例个数配额。取值范围0~1000。(如果已经存在实例, 应该大于已经存在的实例个数)
vcpus_quota	Integer	CPU核数配额。取值范围0~3600000。(如果已经存在实例, 应该大于已经占用的cpu个数)
ram_quota	Integer	内存使用配额, 单位为GB。取值范围0~19200000。(如果已经存在实例, 应该大于已经占用的内存数)

状态码: 400

表 5-193 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

状态码： 500

表 5-194 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
POST https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/quotas
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpu_quota": 20,
    "ram_quota": 40
  } ]
}
```

响应示例

状态码： 200

Success.

```
{
  "quota_list": [ {
    "enterprise_project_id": "0",
    "instance_quota": 20,
    "vcpu_quota": 20,
    "ram_quota": 40
  } ]
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.7 数据库代理

5.7.1 开启数据库代理

功能介绍

开启数据库代理，只支持ELB模式。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[开启数据库代理](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/proxy

表 5-195 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

请求参数

表 5-196 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。

参数	是否必选	参数类型	描述
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-197 请求 Body 参数

参数	是否必选	参数类型	描述
flavor_ref	是	String	代理规格码。 获取方法请参见 查询数据库代理规格信息
node_num	是	Integer	代理实例节点数，取值整数 2-32。

响应参数

状态码： 202

表 5-198 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码： 400

表 5-199 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-200 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。

参数	参数类型	描述
error_msg	String	错误消息。

请求示例

```
POST https://{endpoint}/mysql/v3/0483b6b16e954cb88930a360d2c4e663/instances/43e4feaab48f11e89039fa163ebaa7e4br01/proxy
```

```
{
  "flavor_ref" : "gaussdb.mysql.large.x86.4",
  "node_num" : 2
}
```

响应示例

状态码: 202

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.7.2 关闭数据库代理

功能介绍

关闭数据库代理。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[关闭数据库代理](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

DELETE /mysql/v3/{project_id}/instances/{instance_id}/proxy

表 5-201 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

请求参数

表 5-202 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-203 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码： 400

表 5-204 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-205 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
DELETE https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin01/proxy
```

响应示例

状态码： 200

Success.

```
{  
  "job_id": "04efe8e2-9255-44ae-a98b-d87cae411890"  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.7.3 查询单个数据库代理信息

功能介绍

查询单个数据库代理信息，只支持单proxy查询。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询数据库代理信息列表](#)。

URI

GET /v3/{project_id}/instances/{instance_id}/proxy

表 5-206 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

请求参数**表 5-207** 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-208 响应 Body 参数

参数	参数类型	描述
proxy	MysqlProxy object	Proxy实例信息。

参数	参数类型	描述
master_node	MysqlProxyNode object	主节点信息。
readonly_nodes	Array of MysqlProxyNode objects	只读节点信息。

表 5-209 MysqlProxy

参数	参数类型	描述
pool_id	String	Proxy实例id。
status	String	Proxy实例开启状态。 取值范围: closed、open、frozen、opening、closing、enlarging、freezing和unfreezing。
address	String	Proxy读写分离地址。
port	Integer	Proxy端口信息。
pool_status	String	Proxy实例状态。取值范围: ACTIVE、BUILD、FAILED和DELETED。
delay_threshold_in_seconds	Integer	延时阈值, 单位: 秒。
elb_vip	String	Elb模式的虚拟ip信息。
eip	String	弹性公网IP信息。
vcpus	String	Proxy实例规格的CPU数量。
ram	String	Proxy实例规格的内存数量。
node_num	Integer	Proxy节点个数。
mode	String	Proxy主备模式, 取值范围: Cluster。
nodes	Array of MysqlProxyNodes objects	Proxy节点信息。
flavor_ref	String	Proxy规格信息。
name	String	Proxy实例名称。

表 5-210 MysqlProxyNodes

参数	参数类型	描述
id	String	Proxy节点id。
status	String	Proxy节点状态。取值范围：ACTIVE、ABNORMAL、BUILD和FAILED。
name	String	Proxy节点名称。
role	String	Proxy节点角色：master和slave。
az_code	String	可用区。
frozen_flag	Integer	Proxy节点是否被冻结：0-未冻结；1-冻结；2-冻结删除。

表 5-211 MysqlProxyNode

参数	参数类型	描述
id	String	节点id。
instance_id	String	实例id。
status	String	节点状态。
name	String	节点名称。
weight	Integer	节点读写分离读权重。
available_zones	Array of MysqlProxyAvailable objects	可用区信息。

表 5-212 MysqlProxyAvailable

参数	参数类型	描述
code	String	可用区编码。
description	String	可用区描述。

状态码： 400

表 5-213 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-214 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/v3/054e292c9880d4992f02c0196d3ea468/instances/096c0fc43e804757b59946b80dc27f8bin07/proxy
```

响应示例

状态码: 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" : "az1",
  "description" : "可用区1"
}
},
"readonly_nodes" : {
  "id" : "d23535333138462880bfa1838dfced2no07",
  "instance_id" : "7a871d6d494e4327ad2e326afb591108in07",
  "status" : "ACTIVE",
  "name" : "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node02",
  "weight" : 100,
  "available_zones" : {
    "code" : "az1",
    "description" : "可用区1"
  }
}
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.7.4 查询数据库代理信息

功能介绍

查询数据库代理信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询数据库代理信息列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}/proxy

表 5-215 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

请求参数

表 5-216 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码： 202

表 5-217 响应 Body 参数

参数	参数类型	描述
proxy	MysqlProxy object	Proxy实例信息。
master_node	MysqlProxyNode object	主节点信息。
readonly_nodes	Array of MysqlProxyNode objects	只读节点信息。

表 5-218 MysqlProxy

参数	参数类型	描述
pool_id	String	Proxy实例id。
status	String	Proxy实例开启状态。 取值范围：closed、open、frozen、opening、closing、enlarging、freezing和unfreezin。
address	String	Proxy读写分离地址。
port	Integer	Proxy端口信息。
pool_status	String	Proxy实例状态。取值范围：abnormal、normal、creating和deleted。
delay_threshold_in_seconds	Integer	延时阈值，单位：秒。
elb_vip	String	Elb模式的虚拟ip信息。
eip	String	弹性公网IP信息。
vcpus	String	Proxy实例规格的CPU数量。
ram	String	Proxy实例规格的内存数量。
node_num	Integer	Proxy节点个数。
mode	String	Proxy主备模式，取值范围：Cluster。
nodes	Array of MysqlProxyNodes objects	Proxy节点信息。
flavor_ref	String	Proxy规格信息。

表 5-219 MysqlProxyNodes

参数	参数类型	描述
id	String	Proxy节点id。
status	String	Proxy节点状态。取值范围：normal、abnormal、creating和deleted。
name	String	Proxy节点名称。
role	String	Proxy节点角色：master和slave。
az_code	String	可用区。
frozen_flag	Integer	Proxy节点是否被冻结：0-未冻结；1-冻结；2-冻结删除。

表 5-220 MysqlProxyNode

参数	参数类型	描述
id	String	节点id。
instance_id	String	实例id。
status	String	节点状态。
name	String	节点名称。
weight	Integer	节点读写分离权重。
available_zones	Array of MysqlProxyAvailable objects	可用区信息。

表 5-221 MysqlProxyAvailable

参数	参数类型	描述
code	String	可用区编码。
description	String	可用区描述。

状态码： 400

表 5-222 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-223 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/  
3d39c18788b54a919bab633874c159dfin01/proxy
```

响应示例

状态码: 202

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  
    }  
  },  
  "master_node": {  
    "id": "2a111d6d494e4327ad2e326afb591108in07",  
    "instance_id": "7a871d6d494e4327ad2e326afb591108in07",  
    "status": "ACTIVE",  
    "name": "taurus_mysql80_x86-ondemand-2-1U4G_1_202103070251274842281_node01",  
    "weight": 0,  
    "available_zones": {  
      "code": "az1xahz",  
      "description": "可用区1"  
    }  
  },  
  "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": "可用区1"  
    }  
  }  
}
```

状态码

状态码	描述
202	Success.
400	Client error.

状态码	描述
500	Server error.

错误码

请参见[错误码](#)。

5.7.5 查询数据库代理规格信息

功能介绍

查询数据库代理规格信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[查询数据库代理规格信息](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}/proxy/flavors

表 5-224 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

请求参数

表 5-225 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 202

表 5-226 响应 Body 参数

参数	参数类型	描述
proxy_flavor_groups	Array of MysqlProxyFlavorGroups objects	规格组信息。

表 5-227 MysqlProxyFlavorGroups

参数	参数类型	描述
group_type	String	规格组类型,如x86, arm。
proxy_flavors	Array of MysqlProxyComputeFlavor objects	规格信息。

表 5-228 MysqlProxyComputeFlavor

参数	参数类型	描述
id	String	Proxy规格id。

参数	参数类型	描述
spec_code	String	Proxy规格码。
vcpus	String	CPU大小。例如：1表示1U。
ram	String	内存大小，单位为GB。
db_type	String	数据库类型。
az_status	Object	其中key是可用区编号，value是规格所在az的状态。
region_status	String	Region状态。

状态码： 400

表 5-229 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-230 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/3d39c18788b54a919bab633874c159dfin01/proxy/flavors
```

响应示例

状态码： 202

Success.

```
{
  "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" : {  
  "az1" : "normal"  
},  
"region_status" : "normal"  
}  
}  
}
```

状态码

状态码	描述
202	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.7.6 扩容数据库代理节点的数量

功能介绍

扩容数据库代理节点的数量。DeC专属云账号暂不支持数据库代理。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[扩容数据库代理节点的数量](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

POST /mysql/v3/{project_id}/instances/{instance_id}/proxy/enlarge

表 5-231 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID，严格匹配UUID规则。

请求参数

表 5-232 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

表 5-233 请求 Body 参数

参数	是否必选	参数类型	描述
node_num	是	Integer	proxy节点扩容操作需要扩容的节点数。本次扩容的节点数的取值范围：1~30之间的整数。限制条件：该实例的proxy节点的总数量小于等于32。
proxy_id	是	String	数据库代理ID。 如果实例只开启了一个代理，可不传该参数；如果实例开启了多个代理，则必须指定一个数据库代理，扩容新的代理节点。

响应参数

状态码： 201

表 5-234 响应 Body 参数

参数	参数类型	描述
job_id	String	任务ID。

状态码： 400

表 5-235 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-236 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
post https://{endpoint}/mysql/v3/619d3e78f61b4be68bc5aa0b59edcf7b/instances/
e73893ef73754465a8bd2e0857bbf13ein07/proxy/enlarge
{
  "node_num" : 2,
  "proxy_id": "151c14381ac14ecfb9703a745b992677po01"
}
```

响应示例

状态码： 201

Success.

```
{
  "job_id" : "04efe8e2-9255-44ae-a98b-d87cae411890"
}
```

状态码

状态码	描述
201	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.8 日志管理

5.8.1 查询数据库错误日志

功能介绍

查询数据库错误日志。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[获取错误日志详情列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}/errorlog

表 5-237 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

表 5-238 Query 参数

参数	是否必选	参数类型	描述
start_date	是	String	开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_date	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。

参数	是否必选	参数类型	描述
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100
level	否	String	日志级别
node_id	是	String	节点ID

请求参数

表 5-239 请求 Header 参数

参数	是否必选	参数类型	描述
x-auth-token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-240 响应 Body 参数

参数	参数类型	描述
error_log_list	Array of MysqlErrorLogList objects	错误日志具体信息。
total_record	Integer	总记录数。

表 5-241 MysqlErrorLogList

参数	参数类型	描述
node_id	String	节点ID。
time	String	日期时间UTC时间。
level	String	日志级别。
content	String	错误日志内容。

状态码： 400

表 5-242 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-243 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

无

响应示例

状态码： 200

Success.

```
{
  "error_log_list": [ {
    "node_id": "cc07c60e94ec4575989840e648fb4f66no07",
    "time": "2021-03-06T12:07:05",
    "level": "ERROR, content:[MY013508] [Repl] do failed: 1",
    "total_record": 15
  } ]
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.8.2 查询数据库错误日志

功能介绍

查询数据库错误日志。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[获取错误日志详情列表](#)。

调试

您可以在[API Explorer](#)中调试该接口，支持自动认证鉴权。API Explorer可以自动生成SDK代码示例，并提供SDK代码示例调试功能。

URI

GET /v3/{project_id}/instances/{instance_id}/errorlog

表 5-244 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

表 5-245 Query 参数

参数	是否必选	参数类型	描述
start_date	是	String	开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
end_date	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。
level	否	String	日志级别。 取值范围： <ul style="list-style-type: none">• ALL• INFO• LOG• WARNING• ERROR• FATAL• PANIC• NOTE
node_id	是	String	节点ID

请求参数

表 5-246 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-247 响应 Body 参数

参数	参数类型	描述
error_log_list	Array of MysqlErrorLogList objects	错误日志具体信息。
total_record	Integer	总记录数。

表 5-248 MysqlErrorLogList

参数	参数类型	描述
node_id	String	节点ID。
time	String	日期时间UTC时间。
level	String	日志级别。
content	String	错误日志内容。

状态码： 400

表 5-249 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-250 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
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
```

响应示例

状态码： 200

Success.

```
{  
  "error_log_list": [ {  
    "node_id": "cc07c60e94ec4575989840e648fb4f66no07",  
    "time": "2022-07-17T07:34:33",  
    "level": "ERROR",  
    "content": "[MY013508] [Repl] do failed: 1"  
  } ]  
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.8.3 查询数据库慢日志

功能介绍

查询数据库慢日志。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[获取慢日志详情列表](#)。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/instances/{instance_id}/slowlog

表 5-251 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

表 5-252 Query 参数

参数	是否必选	参数类型	描述
start_date	是	String	开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
end_date	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为+0800。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数

参数	是否必选	参数类型	描述
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100
type	否	String	语句类型，取空值，表示查询所有语句类型，也可指定如下日志类型：INSERT、UPDATE、SELECT、DELETE和CREATE
node_id	是	String	节点ID

请求参数

表 5-253 请求 Header 参数

参数	是否必选	参数类型	描述
x-auth-token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> en-us zh-cn

响应参数

状态码： 200

表 5-254 响应 Body 参数

参数	参数类型	描述
slow_log_list	Array of MysqlSlowLogList objects	错误日志具体信息。
long_query_time	String	慢日志阈值。
total_record	Integer	总记录数。

表 5-255 MysqlSlowLogList

参数	参数类型	描述
node_id	String	节点ID。
count	String	执行次数。
time	String	执行时间。
lock_time	String	等待锁时间。
rows_sent	String	结果行数量。
rows_examined	String	扫描的行数量。
database	String	所属数据库。
users	String	账号。
query_sample	String	执行语法。
type	String	语句类型。
start_time	String	发生时间,UTC时间
client_ip	String	IP地址。

状态码： 400

表 5-256 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-257 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/instances/3d39c18788b54a919bab633874c159dfin01/slowlog
```

响应示例

状态码: 200

Success.

- 示例 1

```
{
  "error_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"
  } ]
}
```

- 示例 2

10

- 示例 3

15

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.8.4 查询数据库慢日志

功能介绍

查询数据库慢日志。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[获取慢日志详情列表](#)。

调试

您可以在 [API Explorer](#) 中调试该接口，支持自动认证鉴权。API Explorer 可以自动生成 SDK 代码示例，并提供 SDK 代码示例调试功能。

URI

GET /v3/{project_id}/instances/{instance_id}/slowlog

表 5-258 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。
instance_id	是	String	实例ID

表 5-259 Query 参数

参数	是否必选	参数类型	描述
start_date	是	String	开始时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
end_date	是	String	结束时间，格式为“yyyy-mm-ddThh:mm:ssZ”。 其中，T指某个时间的开始；Z指时区偏移量，例如偏移1个小时显示为+0100。
offset	否	Integer	索引位置，偏移量。从第一条数据偏移offset条数据后开始查询，默认为0（偏移0条数据，表示从第一条数据开始查询），必须为数字，不能为负数
limit	否	Integer	查询记录数。默认为100，不能为负数，最小值为1，最大值为100。

参数	是否必选	参数类型	描述
type	否	String	语句类型，取空值，表示查询所有语句类型，也可指定如下日志类型： <ul style="list-style-type: none"> • INSERT • UPDATE • SELECT • DELETE • ALTER • DROP • CREATE
node_id	是	String	节点ID

请求参数

表 5-260 请求 Header 参数

参数	是否必选	参数类型	描述
X-Auth-Token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none"> • en-us • zh-cn

响应参数

状态码： 200

表 5-261 响应 Body 参数

参数	参数类型	描述
slow_log_list	Array of MysqlSlowLogList objects	错误日志具体信息。

参数	参数类型	描述
long_query_time	String	慢日志阈值。
total_record	Integer	总记录数。

表 5-262 MysqlSlowLogList

参数	参数类型	描述
node_id	String	节点ID。
count	String	执行次数。
time	String	执行时间。
lock_time	String	等待锁时间。
rows_sent	String	结果行数量。
rows_examined	String	扫描的行数量。
database	String	所属数据库。
users	String	账号。
query_sample	String	执行语法。
type	String	语句类型。
start_time	String	发生时间, UTC时间
client_ip	String	IP地址。

状态码: 400

表 5-263 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码: 500

表 5-264 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
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
```

响应示例

状态码: 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
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

5.9 获取任务信息

5.9.1 获取指定 ID 的任务信息

功能介绍

获取指定ID的任务信息。

须知

该接口计划于2025-03-31下线，建议及时切换到新接口[获取指定ID的任务信息](#)。

接口约束

该接口只可查询任务中心一个月内的异步任务。

调试

您可以在[API Explorer](#)中调试该接口。

URI

GET /mysql/v3/{project_id}/jobs

表 5-265 路径参数

参数	是否必选	参数类型	描述
project_id	是	String	租户在某一Region下的project ID。 获取方法请参见 获取项目ID 。

表 5-266 Query 参数

参数	是否必选	参数类型	描述
id	是	String	任务ID。

请求参数

表 5-267 请求 Header 参数

参数	是否必选	参数类型	描述
x-auth-token	是	String	用户Token。 通过调用IAM服务 获取用户Token 接口获取。 请求响应成功后在响应消息头中包含的“X-Subject-Token”的值即为Token值。
X-Language	否	String	请求语言类型。默认en-us。取值范围： <ul style="list-style-type: none">en-uszh-cn

响应参数

状态码： 200

表 5-268 响应 Body 参数

参数	参数类型	描述
job	GetJobInfoDetail object	任务信息。

表 5-269 GetJobInfoDetail

参数	参数类型	描述
id	String	任务ID。
name	String	任务名称。
status	String	任务执行状态。 取值： <ul style="list-style-type: none">值为“Running”，表示任务正在执行。值为“Completed”，表示任务执行成功。值为“Failed”，表示任务执行失败。 枚举值： <ul style="list-style-type: none">RunningCompletedFailed

参数	参数类型	描述
created	String	创建时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为 +0800 说明：创建时返回值为空，数据库实例创建成功后该值不为空。
ended	String	结束时间，格式为"yyyy-mm-ddThh:mm:ssZ"。其中，T指某个时间的开始；Z指时区偏移量，例如北京时间偏移显示为 +0800 说明：创建时返回值为空，数据库实例创建成功后该值不为空。
process	String	任务执行进度。执行中状态才返回执行进度，例如60%，否则返回""。
instance	GetJobInstanceInfoDetail object	指定ID任务的实例信息。
entities	Object	根据不同的任务，显示不同的内容。
fail_reason	String	任务执行失败时的错误信息。

表 5-270 GetJobInstanceInfoDetail

参数	参数类型	描述
id	String	实例ID。
name	String	实例名称。

状态码： 400

表 5-271 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

状态码： 500

表 5-272 响应 Body 参数

参数	参数类型	描述
error_code	String	错误码。
error_msg	String	错误消息。

请求示例

```
GET https://{endpoint}/mysql/v3/054e292c9880d4992f02c0196d3ea468/jobs?id=a9767ede-fe0f-4888-9003-e843a4c90514
```

响应示例

状态码: 200

Success.

```
{
  "job": {
    "id": "31b8ae23-c687-4d80-b7b4-42a66c9bb886",
    "name": "CreateMysqlInstance",
    "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" ]
  }
}
```

状态码

状态码	描述
200	Success.
400	Client error.
500	Server error.

错误码

请参见[错误码](#)。

6 权限策略和授权项

6.1 策略及授权项说明

如果您需要对您所拥有的云数据库TaurusDB进行精细的权限管理，您可以使用统一身份认证服务（Identity and Access Management，简称IAM），如果华为账号已经能满足您的要求，不需要创建独立的IAM用户，您可以跳过本章节，不影响您使用云数据库TaurusDB的其它功能。

默认情况下，新建的IAM用户没有任何权限，您需要将其加入用户组，并给用户组授予策略或角色，才能使用户组中的用户获得相应的权限，这一过程称为授权。授权后，用户就可以基于已有权限对云服务进行操作。

权限根据授权的精细程度，分为**角色**和**策略**。角色以服务为粒度，是IAM最初提供了一种根据用户的工作职能定义权限的粗粒度授权机制。策略以API接口为粒度进行权限拆分，授权更加精细，可以精确到某个操作、资源和条件，能够满足企业对权限最小化的安全管控要求。

📖 说明

如果您要允许或是禁止某个接口的操作权限，请使用策略。

账号具备所有接口的调用权限，如果使用账号下的IAM用户发起API请求时，该IAM用户必须具备调用该接口所需的权限，否则，API请求将调用失败。每个接口所需要的权限，与各个接口所对应的授权项相对应，只有发起请求的用户被授予授权项所对应的策略，该用户才能成功调用该接口。例如，用户要调用接口来查询GaussDB实例列表，那么这个IAM用户被授予的策略中必须包含允许“gaussdb:instance:list”的授权项，该接口才能调用成功。

支持的授权项

策略包含系统策略和自定义策略，如果系统策略不满足授权要求，管理员可以创建自定义策略，并通过给用户组授予自定义策略来进行精细的访问控制。策略支持的操作与API相对应，授权项列表说明如下：

- 权限：允许或拒绝某项操作。
- 对应API接口：自定义策略实际调用的API接口。
- 授权项：自定义策略中支持的Action，在自定义策略中的Action中写入授权项，可以实现授权项对应的权限功能。

- 依赖的授权项：部分Action存在对其他Action的依赖，需要将依赖的Action同时写入授权项，才能实现对应的权限功能。
- IAM项目(Project)/企业项目(Enterprise Project)：自定义策略的授权范围，包括IAM项目与企业项目。授权范围如果同时支持IAM项目和企业项目，表示此授权项对应的自定义策略，可以在IAM和企业管理两个服务中给用户组授权并生效。如果仅支持IAM项目，不支持企业项目，表示仅能在IAM中给用户组授权并生效，如果在企业管理中授权，则该自定义策略不生效。关于IAM项目与企业项目的区别，详情请参见：[IAM与企业管理的区别](#)。

📖 说明

“√”表示支持，“x”表示暂不支持。

6.2 TaurusDB 授权分类

表 6-1 授权列表

权限	对应API接口	授权项 (Action)	IAM项目 (Project)	企业项目 (Enterprise Project)
查询资源配额	GET /mysql/v3/{project_id}/quotas	gaussdb:instance:list	√	√
设置资源配额	POST /mysql/v3/{project_id}/quotas	gaussdb:quota:modify	√	√
修改资源配额	PUT /mysql/v3/{project_id}/quotas	gaussdb:quota:modify	√	√
查询数据库引擎版本	GET /mysql/v3/{project_id}/datastores/{database_name}	gaussdb:instance:list	√	√
查询数据库规格	GET /mysql/v3/{project_id}/flavors/{database}?version_name={version_name}&spec_code={spec_code}	gaussdb:instance:list	√	√

权限	对应API接口	授权项 (Action)	IAM项目 (Project)	企业项目 (Enterprise Project)
创建实例	POST /mysql/v3/ {projectId}/ instances	gaussdb:instance:create	√	√
查询实例列表	GET /mysql/v3/ {projectId}/ instances	gaussdb:instance:list	√	√
查询实例详细信息	GET /mysql/v3/ {project_id}/ instances/ {instance_id}	gaussdb:instance:list	√	√
删除实例	DELETE /mysql/v3/ {project_id}/ instances/ {instance_id}	gaussdb:instance:delete	√	√
查询参数模板	GET /mysql/v3/ {project_id}/ configurations	gaussdb:parameter:list	√	√
获取任务信息	GET /mysql/v3/ {projectId}/jobs	gaussdb:instance:list	√	√
新增只读节点	POST /mysql/v3/ {project_id}/ instances/ {instance_id}/ nodes/enlarge	gaussdb:instance:create	√	√
删除只读节点	DELETE /mysql/v3/ {project_id}/ instances/ {instance_id}/ nodes/{node_id}	gaussdb:instance:delete	√	√

权限	对应API接口	授权项 (Action)	IAM项目 (Project)	企业项目 (Enterprise Project)
扩容包周期实例 磁盘容量	POST /mysql/v3/ {project_id}/ instances/ {instance_id}/ volume/extend	gaussdb:instance:modifySpec	√	√
修改实例名称	PUT /mysql/v3/ {project_id}/ instances/ {instance_id}/ name	gaussdb:instance:modify	√	√
重置数据库密码	POST /mysql/v3/ {project_id}/ instances/ {instance_id}/ password	gaussdb:instance:modify	√	√
变更数据库实例 的规格	POST /mysql/v3/ {project_id}/ instances/ {instance_id}/ action	gaussdb:instance:modifySpec	√	√
创建手动备份	POST /mysql/v3/ {project_id}/ backups/create	gaussdb:backup:create	√	√
查询备份列表	GET /mysql/v3/ {project_id}/ backups	gaussdb:backup:list	√	√
查询自动备份策略	GET /mysql/v3/ {project_id}/ instances/ {instance_id}/ backups/policy	gaussdb:backup:list	√	√

权限	对应API接口	授权项 (Action)	IAM项目 (Project)	企业项目 (Enterprise Project)
修改自动备份策略	PUT /mysql/v3/ {project_id}/ instances/ {instance_id}/ backups/policy/ update	gaussdb:instance:modifyBackupPolicy	√	√

7 附录

7.1 异常请求结果

- 异常响应要素说明

表 7-1 异常响应要素说明

名称	参数类型	说明
error_code	String	提交任务异常时返回的错误编码，详细错误码描述请参见 错误码 。
error_msg	String	提交任务异常时返回的错误描述信息。

- 响应样例

```
{  
  "error_code": "DBS.280234",  
  "error_msg": "非法实例名称"  
}
```

7.2 状态码

状态码列表：

表 7-2 状态码说明

状态码	编码	错误码说明
100	Continue	继续请求。 这个临时响应用来通知客户端，它的部分请求已经被服务器接收，且仍未被拒绝。
101	Switching Protocols	切换协议。只能切换到更高级的协议。 例如，切换到HTTP的新版本协议。

状态码	编码	错误码说明
200	OK	请求成功。
201	Created	创建类的请求完全成功。
202	Accepted	已经接受请求，但未处理完成。
203	Non-Authoritative Information	非授权信息，请求成功。
204	NoContent	请求完全成功，同时HTTP响应不包含响应体。在响应OPTIONS方法的HTTP请求时返回此状态码。
205	Reset Content	重置内容，服务器处理成功。
206	Partial Content	服务器成功处理了部分GET请求。
300	Multiple Choices	多种选择。请求的资源可包括多个位置，相应可返回一个资源特征与地址的列表用于用户终端（例如：浏览器）选择。
301	Moved Permanently	永久移动，请求的资源已被永久的移动到新的URI，返回信息会包括新的URI。
302	Found	资源被临时移动。
303	See Other	查看其它地址。 使用GET和POST请求查看。
304	Not Modified	所请求的资源未修改，服务器返回此状态码时，不会返回任何资源。
305	Use Proxy	所请求的资源必须通过代理访问。
306	Unused	已经被废弃的HTTP状态码。
400	BadRequest	非法请求。 建议直接修改该请求，不要重试该请求。
401	Unauthorized	在客户端提供认证信息后，返回该状态码，表明服务端指出客户端所提供的认证信息不正确或非法。
402	Payment Required	保留请求。
403	Forbidden	请求被拒绝访问。 返回该状态码，表明请求能够到达服务端，且服务端能够理解用户请求，但是拒绝做更多的事情，因为该请求被设置为拒绝访问，建议直接修改该请求，不要重试该请求。
404	NotFound	所请求的资源不存在。 建议直接修改该请求，不要重试该请求。

状态码	编码	错误码说明
405	MethodNotAllowed	请求中带有该资源不支持的方法。 建议直接修改该请求，不要重试该请求。
406	Not Acceptable	服务器无法根据客户端请求的内容特性完成请求。
407	Proxy Authentication Required	请求要求代理的身份认证，与401类似，但请求者应当使用代理进行授权。
408	Request Time-out	服务器等候请求时发生超时。 客户端可以随时再次提交该请求而无需进行任何更改。
409	Conflict	服务器在完成请求时发生冲突。 返回该状态码，表明客户端尝试创建的资源已经存在，或者由于冲突请求的更新操作不能被完成。
410	Gone	客户端请求的资源已经不存在。 返回该状态码，表明请求的资源已被永久删除。
411	Length Required	服务器无法处理客户端发送的不带Content-Length的请求信息。
412	Precondition Failed	未满足前提条件，服务器未满足请求者在请求中设置的其中一个前提条件。
413	Request Entity Too Large	由于请求的实体过大，服务器无法处理，因此拒绝请求。为防止客户端的连续请求，服务器可能会关闭连接。如果只是服务器暂时无法处理，则会包含一个Retry-After的响应信息。
414	Request-URI Too Large	请求的URI过长（URI通常为网址），服务器无法处理。
415	Unsupported Media Type	服务器无法处理请求附带的媒体格式。
416	Requested range not satisfiable	客户端请求的范围无效。
417	Expectation Failed	服务器无法满足Expect的请求头信息。
422	UnprocessableEntity	请求格式正确，但是由于含有语义错误，无法响应。
429	TooManyRequests	表明请求超出了客户端访问频率的限制或者服务端接收到多于它能处理的请求。建议客户端读取相应的Retry-After首部，然后等待该首部指出的时间后再重试。
500	InternalServerError	表明服务端能被请求访问到，但是不能理解用户的请求。

状态码	编码	错误码说明
501	Not Implemented	服务器不支持请求的功能，无法完成请求。
502	Bad Gateway	充当网关或代理的服务器，从远端服务器接收到了一个无效的请求。
503	ServiceUnavailabl e	被请求的服务无效。 建议直接修改该请求，不要重试该请求。
504	ServerTimeout	请求在给定的时间内无法完成。客户端仅在为请求指定超时（Timeout）参数时会得到该响应。
505	HTTP Version not supported	服务器不支持请求的HTTP协议的版本，无法完成处理。

7.3 错误码

当您调用API时，如果遇到“APIGW”开头的错误码，请参见[API网关错误码](#)进行处理。

状态码	错误码	错误信息	描述	处理措施
500	DBS.0500000 0	server error.	服务器错误。	请联系客服进行处理。
400	DBS.0500000 1	The kernel version is too early.	内核版本过 低，不支持创 建数据库代 理。	内核版本过低，请 进行内核版本升 级。
400	DBS.0500000 6	The username and password must be different.	用户名和密码 不能相同。	请使用强度更高的 密码。
400	DBS.0500000 7	The password cannot be the username spelled backwards.	密码不能是用 户名的倒序。	请使用强度更高的 密码。
400	DBS.0500000 8	The current version is the latest. No update is available.	当前实例源版 本与目标版本 相同，不需要 升级。	请选择比原版本更 高的版本。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000009	The truncate_lsn value exceeds the threshold. Change the value during off-peak hours or contact technical support.	truncate_lsn 超过阈值，请在业务低峰期进行变更，或者联系技术人员处理后变更。	truncate_lsn 超过阈值，请在业务低峰期进行变更，或者联系技术人员处理后变更。
400	DBS.05000010	The write priority of proxy nodes must be unique.	数据库代理下的写优先级不能重复，请重新设置。	数据库代理下的写优先级不能重复，请重新设置。
400	DBS.05000011	The value must be a positive integer and less than the number of primary nodes.	写优先级取值为正整数，且小于实例的主节点数量，请重新设置。	写优先级取值为正整数，且小于实例的主节点数量，请重新设置。
400	DBS.05000012	Please contact Huawei cloud customer service to upgrade.	请联系华为云客服进行升级。	请联系客服进行升级。
400	DBS.05000014	Dedicated edition cannot be changed to general-purpose edition.	实例规格不允许从独享型变更到通用型。	实例规格不允许从独享型变更到通用型。
400	DBS.05000015	General-purpose edition is not supported.	当前租户不支持通用型规格。	当前租户不支持通用型规格。
400	DBS.05000018	Request parameter list is empty.	请求参数列表为空。	请求参数列表为空，请检查参数列表。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000019	DBA Assistant is not supported.	不支持智能DBA。	不支持智能DBA，请联系客服开通。
400	DBS.05000020	No more ip addresses are available, need \$ {ipNumNeed} ,left \$ {ipNumLeft}.	子网内IP不足，需要IP\$ {ipNumNeed} 个,剩余IP\$ {ipNumLeft} 个。	请更换子网创建实例。
400	DBS.05000021	dnsName has already exist.	内网域名已存在。	请更换内网域名。
400	DBS.05000022	InstanceId do not match proxy.	实例与数据库代理不匹配。	请更换数据库代理。
400	DBS.05000023	The operation not supported. Contact the administrator please.	不支持该操作，请联系客服人员。	不支持该操作，请联系客服人员处理。
400	DBS.05000024	This operation cannot be performed because there are large transactions in the database.	数据库中存在大事务，不能进行操作。	数据库中存在大事务，不能进行操作。
400	DBS.05000025	Failed to lock the resource package.	资源包加锁失败。	资源包加锁失败，请联系客服人员处理。
400	DBS.05000026	Resource package already exists.	资源包已存在。	资源包已存在，请联系客服人员处理。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000027	If read replicas can be automatically added or deleted during the auto scaling policy, you cannot create or delete proxy instances.	开启自动变配的增删只读功能后，不允许开关数据库代理。	开启自动变配的增删只读功能后，不允许开关数据库代理。
400	DBS.05000028	You do not have operation permissions \$ {agencyName}. Check account permissions on IAM.	当前用户没有操作权限 \$ {agencyName}，请通过IAM检查账户权限。	当前用户没有操作权限，请通过IAM检查账户权限。
400	DBS.05000029	Encrypted backup and cross-region backup cannot be both enabled.	备份加密实例不支持打开跨区域备份。	备份加密实例不支持打开跨区域备份，请先关闭备份加密功能。
400	DBS.05000030	Encrypted backup and cross-region backup cannot be both enabled.	存在跨区域备份实例不支持打开备份加密。	存在跨区域备份实例不支持打开备份加密，请先关闭跨区备份功能。
400	DBS.05000031	The current KMS algorithm does not support encrypted backup.	kms密钥算法不支持备份加密。	当前kms密钥算法不支持备份加密，请选择SM4或AES算法的密钥。
400	DBS.05000032	Proxy not support this port.	数据库代理不支持该端口号，请参考官方文档填写正确的端口号。	数据库代理不支持该端口号，请参考官方文档填写正确的端口号。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000033	Proxy dns duplicate, please reset it.	数据库代理地址域名重复, 请重新设置。	需要重新设置代理地址 (即读写分离地址) 域名。
400	DBS.05000034	The kernel version of the new instance must be later than or equal to original instance, please reset it.	新实例内核版本应该大于等于原实例内核版本, 请重新设置。	请选择更高的内核版本
400	DBS.05000035	Specifying complete kernel version is not supported, please reset it.	不支持指定4位内核版本, 请重新设置。	请联系客服开启对应的白名单。
400	DBS.05000036	Invalid records. Enter a valid value.	无效的查询记录数, 请按照取值范围重新输入。	无效的查询记录数, 请按照取值范围重新输入。
400	DBS.05000037	Invalid database charset. Enter a valid charset from [{charsets}].	无效的数据库字符集, 请按照[{charsets}]取值范围重新输入。	根据提示信息修改为正确的字符集。
400	DBS.05000038	The tag is not compliant. The tag must comply with the corresponding tag policy.	标签不合规。标签应该符合对应的标签策略。	请联系客服进行处理。
400	DBS.05000042	Invalid databases. Enter a valid value.	无效的数据库表, 请重新输入。	请核对数据库表名是否正确。
400	DBS.05000043	Invalid last_table_info. Enter a valid value.	无效的最终库表, 请重新输入。	请核对最终库表是否正确。

状态码	错误码	错误信息	描述	处理措施
400	DBS.0500004 4	Param error: [\$ {parameter}].	参数错误: [\$ {parameter}]。 。	请根据错误描述输入正确的参数。
400	DBS.0500004 5	Some databases name are repeated.	备份的数据库重复。	请检查备份的数据库是否重复。
400	DBS.0500004 6	Some tables name are repeated.	备份的数据库表重复。	请检查备份的数据库表是否重复。
400	DBS.0500004 7	Some databases name are not exists.	源数据库不存在。	请检查源数据库是否正确。
400	DBS.0500004 8	Some tables name are not exists.	源数据库表不存在。	请检查源数据库表是否正确。
400	DBS.0500004 9	Binlog meta data is not exist.	Binlog日志元数据不存在。	请联系客服进行处理。
400	DBS.0500005 8	The non-extended-use specifications cannot be changed to extended-use specifications or the other way around.	实例规格不允许增程型与非增程型互相变更。	请选择正确的规格进行变更。
400	DBS.0500006 2	Kernel parameter [\$ {parameter}] must be [\$ {paraValue}].	内核参数[\$ {parameter}]必须为[\$ {paraValue}]。 。	请根据错误描述修改参数值。
400	DBS.0500006 8	Not support open TDE function.	不支持打开TDE。	请联系客服打开对应的白名单。
400	DBS.0500006 9	The current kernel version does not support the TDE function.	当前内核版本不支持打开TDE。	请选择支持打开TDE的内核版本。

状态码	错误码	错误信息	描述	处理措施
400	DBS.0500007 0	Invalid TDE encryption type. Only SM4 or AES256 is supported.	TDE加密类型无效，仅支持SM4或AES256。	请选择支持的TDE加密类型。
400	DBS.0500007 1	Failed to update the TDE information.	更新TDE信息失败。	请联系客服进行处理。
400	DBS.0500007 2	The current user is in the blacklist. They have no permissions to create DB instances.	当前用户在黑名单中，无权限创建实例。	请联系客服进行处理。
400	DBS.0500007 3	The TDE instance cannot change to a kernel version that does not support TDE.	TDE实例无法变更到不支持TDE的内核版本。	请选择支持TDE的内核版本。
400	DBS.0500007 4	You cannot specify AZs for read replicas.	不支持指定可用区创建只读节点。	请联系客服打开对应的白名单。
400	DBS.0500007 6	Invalid proxy name.	无效的Proxy名称。	请选择有效的代理名称。
400	DBS.0500007 7	Node deletion failed. Delete residual data on the node first.	操作节点存在数据库尚未清理，不允许删除。	请清理数据库后再删除对应的节点。
400	DBS.0500007 8	New node weight is null. Please input it.	新增节点权重为空，请输入。	新增节点时，请输入对应的权重。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000079	Failed to verify the database synchronization configuration. Please check: [{parameter}].	库同步配置校验失败，请检查： [{parameter}]。	请根据错误描述，检查报错参数。
400	DBS.05000080	Failed to verify the table synchronization configuration. Please check: [{parameter}].	表同步配置校验失败，请检查： [{parameter}]。	请根据错误描述，检查报错参数。
400	DBS.05000081	Too many nodes.	节点个数超过最大配额。	请选择低于最大配额的节点个数。
400	DBS.05000084	Read replicas are being created.	创建只读节点过程中不允许关闭自动变配策略。	等只读节点创建完毕，再关闭自动变配策略。
400	DBS.05000085	The availability zone mode is not supported: [{parameter}].	不支持该可用区类型： [{parameter}]。	请根据错误描述，检查报错参数。
400	DBS.05000086	Invalid AZ: [{parameter}].	可用区取值非法： [{parameter}]。	请根据错误描述，检查报错参数。
400	DBS.05000087	Invalid dedicated resource id: [{parameter}].	专属资源ID非法： [{parameter}]。	请根据错误描述，检查报错参数。
400	DBS.05000088	Invalid backup time: [{parameter}].	备份时间非法： [{parameter}]。	请根据错误描述，检查报错参数。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000089	Invalid node quantity: [{parameter}].	节点数量非法: [{parameter}]。	请根据错误描述, 检查报错参数。
400	DBS.05000090	Invalid security group: [{parameter}].	安全组非法: [{parameter}]。	请根据错误描述, 检查报错参数。
400	DBS.05000091	Unsupported operation: [{parameter}].	不支持该操作: [{parameter}]。	请根据错误描述, 检查报错参数。
400	DBS.05000092	General volume is not supported.	当前租户不支持通用存储规格。	请联系客服打开对应的白名单。
400	DBS.05000093	Readonly proxy with balance route not support route to master.	只读模式数据库代理开启负载均衡时不支持路由到主。	请联系客服进行处理。
400	DBS.05000094	The cv_lsn value exceeds the threshold. Change the value during off-peak hours or contact technical support.	cv_lsn超过阈值, 请在业务低峰期进行变更, 或者联系技术人员处理后变更。	请联系客服进行处理。
400	DBS.05000095	This operation cannot be performed because there are long transactions in the database.	数据库中存在长事务, 不能进行操作。	请联系客服进行处理。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000096	CPU usage is too high or tables number exceeds the upper limit not support re-diagnose.	CPU过高或者表数量超过限制值时不支持下发重新诊断。	请联系客服进行处理。
409	DBS.05000097	The same account name and host IP already exist.	已存在相同的账号名称和主机IP。	请选择不同的账号名称或者主机IP。
400	DBS.05000098	The current kernel version does not support level-1 backups.	当前内核版本不支持打开一级备份。	请选择合适的内核版本。
400	DBS.05000099	The flavor of arm standard don't support to resize.	标准版规格不支持规格变更。	请选择正确的规格码进行规格变更。
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.	该节点与主节点规格不一致，不允许设定故障倒换优先级为1。	请设置为其他故障倒换优先级。
400	DBS.05000101	A manual switchover can be performed only for nodes with the failover priority set to 1.	仅可手动倒换到优先级为1的节点。	手动倒换时只支持倒换到优先级为1的节点。
400	DBS.05000102	A node with failover priority set to 1 is required.	必须存在一个倒换优先级为1的节点。	修改故障倒换优先级需要确保至少存在一个倒换优先级为1的节点。

状态码	错误码	错误信息	描述	处理措施
400	DBS.05000103	Specifications of yearly/monthly instances cannot be upgraded and downgraded at the same time.	不支持包周期资源同时升配和降配。	请联系客服进行处理。
400	DBS.200001	Parameter error.	参数错误。	检查传入的参数或URL是否全部正确。
400	DBS.200004	Parameter error.	参数错误。	检查传入的参数或URL是否全部正确。
400	DBS.200006	The request is null. Enter a request parameter.	请求为空，请输入请求参数。	检查是否有必选请求参数为空。
400	DBS.200021	Invalid DB instance name.	实例名非法。	检查实例名称是否正确。
400	DBS.200023	Storage space is out of range.	卷大小超出允许范围。	检查磁盘大小是否超出允许范围。
400	DBS.200024	Invalid region.	Region非法。	检查可用区名称是否正确，可用区是否在可用范围内。
400	DBS.200025	Invalid AZ.	可用区取值非法。	检查可用区名称是否正确，可用区是否在可用范围内。
400	DBS.200026	Invalid storage type.	卷类型非法。	检查磁盘类型是否正确。
400	DBS.200027	Storage space must be a multiple of 10.	卷大小不是10的整数倍。	检查磁盘大小是否是10的整数倍。
400	DBS.200040	The DB engine or version is not supported.	不支持的数据库类型或版本。	检查是否数据库类型和版本是否匹配，数据库类型和版本是否符合要求。

状态码	错误码	错误信息	描述	处理措施
400	DBS.200041	Invalid database version.	数据库版本非法。	检查数据库的版本号是否支持。
400	DBS.200042	The DB engine does not exist.	引擎版本不存在。	检查数据库引擎是否为云数据库 GaussDB支持的引擎。
400	DBS.200043	Invalid synchronize model.	HA同步模式非法。	检查HA同步模式是否符合要求。
400	DBS.200048	Invalid VPC ID.	VPC id非法。	检查VPC ID、名称是否正确，是否符合要求。
400	DBS.200049	Invalid subnet ID.	子网的网络id非法。	检查子网ID、名称是否正确，是否符合要求。
400	DBS.200051	Invalid HA mode.	不合法的ha模式。	检查HA模式是否符合要求。
400	DBS.200052	Invalid database root password.	数据库root密码非法。	检查用户名和密码是否匹配，密码是否符合密码要求。
400	DBS.200053	The selected specifications do not exist.	所选规格不存在。	检查规格是否正确，当前可用区是否支持该规格。
400	DBS.200054	Invalid specifications.	所选规格非法。	检查规格是否正确，当前可用区是否支持该规格。
400	DBS.200056	The maximum number of nodes has been reached.	节点个数达到最大值。	检查实例节点个数是否达到最大值。
400	DBS.200063	Invalid cluster mode.	集群模式非法。	检查传入的mode参数是否非法。
400	DBS.200086	This operation is not allowed by the DB instance status.	实例状态不允许做该操作。	检查实例的状态或实例正在进行的操作是否与请求冲突。

状态码	错误码	错误信息	描述	处理措施
400	DBS.200087	The number of tags added for the DB instance has reached the quota.	单个实例标签数量达到最大配额。	检查实例的标签是否超过最大限制
400	DBS.200098	The tag already exists.	该资源标签已存在。	检查标签是否已经存在。
400	DBS.200302	Storage space must be a multiple of 10.	磁盘大小不是10的整数倍。	检查磁盘大小是否是10的倍数。
400	DBS.200306	The new storage space must be greater than or equal to the original storage space.	扩容参数不合法。	检查设置的磁盘大小是否已经超过上限。
400	DBS.200461	The parameter value is out of range.	参数值超出范围。	检查传入的port参数是否非法
400	DBS.200504	Invalid database version.	数据库版本非法。	检查传入的数据库版本号是否非法
400	DBS.200543	The job does not exist.	任务不存在	检查传入的任务Id是否非法
400	DBS.200823	The database does not exist.	数据库不存在。	检查传入的数据库是否存在
400	DBS.200824	The database account does not exist.	数据库帐号不存在。	检查传入的用户是否存在
400	DBS.201014	This operation is not allowed by the DB instance status.	实例状态不允许做该操作。	检查实例的状态或实例正在进行的操作是否与请求冲突。
400	DBS.201101	Invalid backup cycle.	备份周期非法。	检查备份周期是否符合要求。

状态码	错误码	错误信息	描述	处理措施
400	DBS.201103	Invalid backup start time.	备份开始时间非法。	检查备份开始时间是否符合要求。
400	DBS.201106	Invalid retention days.	备份保留天数非法。	检查备份保留天数是否符合要求。
400	DBS.201203	The backup file does not exist.	备份文件不存在。	检查该备份是否存在，备份是否匹配实例。
400	DBS.201207	The DB engine or version is not supported.	不支持该数据库引擎或版本。	检查数据库引擎是否为云数据库 GaussDB支持的引擎。
400	DBS.201208	The operation is not allowed by the backup status.	备份状态不允许。	请检查备份状态是否为"备份完成"。
400	DBS.212002	Incorrect parameter group quota.	参数组配额错误。	参数组配额超过限制，请删除无用的参数模板再重新创建。
400	DBS.212003	Operation not allowed.	不支持此操作。	默认参数模板不允许重置和删除。
400	DBS.212004	Parameter group update error.	参数组更新错误。	请检查要修改的参数值是否合法。
400	DBS.212005	The node does not belong to the group.	节点不属于组。	该节点不属于该实例，请检查实例id或节点id是否正确。
400	DBS.212007	The DB engine does not exist.	引擎不存在。	检查数据库引擎是否存在。
400	DBS.212008	The DB engine is not supported.	不支持的引擎。	检查数据库引擎是否为云数据库 GaussDB支持的引擎。
400	DBS.212009	Task processing failed.	任务处理失败。	任务处理失败，请联系客服解决。

状态码	错误码	错误信息	描述	处理措施
400	DBS.212010	The parameter group is being applied.	绑定正在执行。	正在应用参数模板，待完成后再进行其他操作。
400	DBS.212011	Application failed.	绑定失败。	应用参数模板失败，请联系客服解决。
400	DBS.212012	The parameter does not exist.	参数不存在。	请检查要修改的参数名是否正确。
400	DBS.212014	The node does not have a default parameter group.	节点没有默认参数组。	请检查节点ID或参数组ID是否正确。
400	DBS.212015	Partial success.	部分成功。	请检查要修改的参数名是否正确。
400	DBS.212016	Parameter update failed.	参数更新失败。	修改参数失败，请联系客服解决。
400	DBS.212017	Invalid parameter.	参数错误。	请检查参数名是否合法。
400	DBS.212025	Update failed.	更新失败。	修改参数失败，请联系客服解决
400	DBS.212030	Parameter error	参数错误。	参数模板名已经存在。
400	DBS.212032	The parameter template has been applied.	参数模板已被应用。	参数模板已经被应用，不能删除该模板。
400	DBS.212037	Parameters are incorrectly set.	参数设置不正确。	检查参数是否合法或参数是否在合法范围内。
400	DBS.270024	Proxy instance does not exist.	Proxy实例不存在。	检查租户是否拥有该proxy实例，传入的proxy实例id是否正确，代理实例是否存在。
400	DBS.270025	Invalid weight.	权重非法。	检查传入的权重格式和范围是否正确。

状态码	错误码	错误信息	描述	处理措施
400	DBS.270026	Invalid proxy mode.	数据库代理类型非法。	检查传入的数据库代理类型是否正确。
400	DBS.270027	Select a proxy instance.	未指定数据库代理。	检查参数数据库代理id是否为空。
400	DBS.280001	Parameter error.	参数错误。	检查传入的参数或URL是否全部正确，是否符合要求。
400	DBS.280127	Invalid backup description.	备份描述非法。	检查备份描述是否正确，是否符合要求。
400	DBS.280128	The database name does not exist.	数据库名不存在。	检查租户是否拥有该实例，实例名或实例ID是否正确，实例是否存在。
400	DBS.280203	This is a weak password. Please enter a strong password.	这是一个弱密码，请输入一个强度大一些的密码。	检查密码是否过于简单，请更改为较复杂的密码。
400	DBS.280204	Invalid parameter.	输入参数不合法。	检查参数是否合法或参数是否在合法范围内。
400	DBS.280214	The backup does not exist.	备份不存在。	检查备份保留天数是否正确。
400	DBS.280216	Invalid backup start time.	备份开始时间非法。	检查备份开始时间是否符合要求，备份开始时间和备份结束时间的关系是否正确。
400	DBS.280235	Invalid database type.	数据库类型非法	检查数据库引擎名称是否正确。
400	DBS.280237	Datastore not specified.	Datastore为空。	检查数据库引擎是否为云数据库 GaussDB支持的引擎。

状态码	错误码	错误信息	描述	处理措施
400	DBS.280238	The DB engine or version is not supported.	不支持的数据库类型或版本。	检查是否数据库类型和版本是否匹配，数据库类型和版本是否符合要求。
400	DBS.280239	Invalid specifications.	所选规格非法。	检查规格码是否正确，规格在当前可用区是否存在，规格是否支持。
400	DBS.280241	Invalid storage type.	卷类型非法。	检查磁盘的类型是否正确，是否符合要求。
400	DBS.280242	Storage space is out of range.	卷大小超出允许范围。	检查磁盘大小的值是否正确。
400	DBS.280246	Invalid database root password	数据库root密码非法。	检查用户名和密码是否匹配，密码是否符合密码要求。
400	DBS.280250	Invalid backup retention days.	备份保留期非法。	检查输入备份数据的保留时间是否合法或是否在合法范围内。
400	DBS.280251	Invalid backup cycle.	备份周期不合法。	检查输入备份周期是否合法或是否在合法范围内。
400	DBS.280253	Invalid backup start time.	备份开始时间非法。	检查备份开始时间是否符合要求，备份开始时间和备份结束时间的关系是否正确。
400	DBS.280260	Invalid available zone mode.	无效的可用区模式。	检查可用区的模式是否有效。
400	DBS.280270	The parameter does not exist.	参数不存在。	请检查要修改的参数名是否正确。
400	DBS.280271	The parameter value is out of range.	参数值超出范围。	检查参数值是否在有效范围内。

状态码	错误码	错误信息	描述	处理措施
400	DBS.280272	The tag key must be unique.	新增tag存在重复的key。	检查新增tag是否已存在。
400	DBS.280277	Invalid backup name.	备份名称非法。	检查备份名称是否正确，是否符合要求。
400	DBS.280285	Invalid AZ.	可用区取值非法。	检查可用区名称是否正确，可用区是否在可用范围内。
400	DBS.280288	Invalid FlavorRef.	规格非法。	检查规格ID是否为null或空串。
400	DBS.280311	Invalid storage space size.	存储空间大小非法。	检查磁盘大小的值是否正确，是否符合要求。
400	DBS.280325	Invalid storage information.	硬盘信息不合法。	检查磁盘大小或磁盘类型是否合法。
400	DBS.280342	Invalid cluster mode.	集群模式非法。	检查实例模式是否正确，是否符合要求，实例模式与实例ID是否匹配。
400	DBS.280364	Invalid database port.	数据库端口号无效。	检查数据库设置的端口是否可用。
400	DBS.280402	Invalid HA mode.	Ha模式非法。	检查输入的Ha模式是否符合要求。
400	DBS.280404	Invalid DB instance ID or node ID format.	实例ID非法。	检查实例ID是否符合规则。
400	DBS.280434	Invalid specification code.	所选规格码非法。	检查规格码是否符合规则，规格是否存在，规格是否可用。
400	DBS.280439	Invalid records. Enter a positive integer less than 100.	无效的查询记录数，请输入小于100的正整数。	检查查询记录数是否在有效范围内。
400	DBS.280448	The storage type is sold out.	当前卷类型已售罄。	检查当前卷类型是否存在可用。

状态码	错误码	错误信息	描述	处理措施
400	DBS.280449	Operation not allowed on frozen objects.	不能对冻结的对象执行该操作。	检查实例是否冻结，当前操作是否支持在实例冻结期间进行。
400	DBS.280450	The DB instance specifications are sold out.	当前规格已售罄。	规格已售罄，请更换可用区或联系客服。
400	DBS.280500	ELB must be enabled.	需开启ELB。	需开启ELB。
400	DBS.280505	CBC error: There are unprocessed orders.	CBC错误：存在未处理的订单，不能进行当前操作。	检查当前订单是否已处理完成。
400	DBS.290000	Parameter error.	参数错误。	检查传入的参数或URL是否全部正确，是否符合要求。
400	DBS.290001	Invalid parameter letter case.	参数大小写错误。	检查传入的参数大小写是否正确，是否符合要求。
403	DBS.200010	The DB instance ID or user ID may be null, or the operation is not authorized.	实例ID和用户ID可能为空，或者操作越权。	检查入参是否正确，实例是否存在，检查租户是否操作越权。
403	DBS.200044	Resource not found or permission denied.	访问资源不存在，或者无访问权限。	检查入参是否正确，访问资源是否存在，检查租户是否有访问权限。
403	DBS.200604	The DB instance ID or user ID may be null, or the operation is not authorized.	实例ID和用户ID可能为空，或者操作越权。	检查入参是否正确，实例是否存在，检查租户是否操作越权。
403	DBS.200810	You are not allowed to create databases on read replicas.	不能在只读实例创建数据库。	只读实例不允许创建数据库，请更换读写实例创建数据库。

状态码	错误码	错误信息	描述	处理措施
403	DBS.200819	You are not allowed to delete database users on read replicas.	不能在只读实例执行删除数据库用户。	只读实例不允许删除数据库用户。
403	DBS.201003	Resource not found or permission denied.	访问资源不存在，或者无访问权限。	检查入参是否正确，访问资源是否存在，检查租户是否有访问权限。
403	DBS.280015	Resource not found or permission denied.	访问资源不存在，或者无访问权限。	检查入参是否正确，访问资源是否存在，检查租户是否有访问权限。
403	DBS.280056	Invalid token.	Token非法。	检查实例是否属于租户，token是否已经重新获取。
404	DBS.200002	The DB instance does not exist.	实例不存在。	检查实例ID、实例是否正确，实例是否存在。
404	DBS.200008	The ECS information of the DB instance cannot be found.	请检查数据库，确认实例的虚拟机信息，找不到该实例的虚拟机信息。	检查入参是否正确，实例状态是否正常。
404	DBS.200013	The original DB instance does not exist.	源实例不存在。	检查实例ID、实例是否正确，实例是否存在。
404	DBS.200045	The DB instance does not exist.	实例不存在。	检查实例ID、实例是否正确，实例是否存在。
404	DBS.200050	The security group does not exist or does not belong to the VPC.	安全组不存在，或不属于该VPC。	检查输入安全组ID是否合法，安全组是否存在，节点的读内网地址是否属于该安全组。
404	DBS.200408	The DB instance does not exist.	实例不存在或已删除。	检查实例ID、实例是否正确，实例是否存在。

状态码	错误码	错误信息	描述	处理措施
404	DBS.200470	The region or AZ does not exist.	Region或可用区不存在。	检查可用区是否正确。
404	DBS.200501	The subnet does not exist or does not belong to the VPC.	子网不存在, 或不属于该VPC。	检查子网ID、名称是否存在, 是否匹配VPC。
404	DBS.200503	The VPC does not exist or does not belong to the user.	VPC不存在, 或不属于该用户。	检查租户是否拥有该VPC。
404	DBS.200602	The DB instance does not exist.	该实例不存在。	检查实例ID、实例是否正确, 实例是否存在。
404	DBS.201010	The backup information does not exist.	备份信息不存在。	检查该备份是否存在, 备份是否匹配实例。
404	DBS.201028	The DB instance does not exist.	实例不存在或已删除。	检查实例ID、实例是否正确, 实例是否存在。
404	DBS.212001	The parameter group does not exist.	参数组不存在。	检查参数组是否存在。
404	DBS.290002	The selected specifications do not exist.	所选规格不存在。	检查规格是否正确, 当前可用区是否支持该规格。
404	DBS.290005	The DB instance does not exist.	该实例不存在。	检查实例ID、实例是否正确, 实例是否存在。
404	DBS.290011	The DB instance does not exist.	实例不存在。	检查实例ID、实例是否正确, 实例是否存在。
404	DBS.290013	Resource not found.	未找到资源。	检查入参是否正确, 实例是否存在。

状态码	错误码	错误信息	描述	处理措施
409	DBS.200011	Another operation is being performed on the DB instance or the DB instance is faulty.	该实例正在进行其它操作或该实例故障，无法执行该操作，请稍后重试。	检查实例状态或实例正在进行的操作是否和请求冲突。
409	DBS.200019	Another operation is being performed on the DB instance or the DB instance is faulty.	该实例正在进行其他操作或该实例故障，无法执行该操作，请稍后重试。	检查实例状态或实例正在进行的操作是否和请求冲突。
409	DBS.200022	The DB instance name already exists.	实例名称已存在。	检查实例名称是否已经存在。
409	DBS.200047	Another operation is being performed on the DB instance or the DB instance is faulty.	该实例正在进行其它操作或该实例故障，无法执行该操作，请稍后重试。	检查实例状态或实例正在进行的操作是否和请求冲突。
409	DBS.200316	This operation cannot be performed because the DB instance status is Storage full.	当前实例状态为存储空间满，不能进行该操作。	实例存储空间已满，请调整存储空间大小。
409	DBS.200826	The database name already exists.	数据库名称已存在。	检查数据库名称是否合法。
409	DBS.200827	The database user already exists.	账号名称已存在。	检查数据库用户是否合法。

状态码	错误码	错误信息	描述	处理措施
409	DBS.200828	You are not allowed to create a database built-in account.	数据库内置账号，用户不可创建。	检查数据库用户是否合法。
409	DBS.201202	Another operation is being performed on the DB instance or the DB instance is faulty.	该实例正在进行其它操作或该实例故障，无法执行该操作，请稍后重试。	检查实例状态或实例正在进行的操作是否和请求冲突。
409	DBS.201205	Backup is in progress, please wait.	正在备份中，请稍等。	实例正在备份中，等待备份完成后重试操作。
409	DBS.212006	Another operation is being performed on the DB instance or the DB instance is faulty.	该实例正在进行其它操作或该实例故障，无法执行该操作，请稍后重试。	检查实例状态或实例正在进行的操作是否和请求冲突。
409	DBS.280406	Operation not allowed by the DB instance type or status.	实例类型或状态受限，操作不允许。	操作不允许，可能是实例类型错误或实例状态不允许，请检查实例类型和实例状态。
413	DBS.200046	The number of DB instances has reached the quota.	实例数量达到配额。	实例数量配额达到限制，请联系管理员调整配额。
413	DBS.290003	The number of DB instances has reached the quota.	实例数量达到配额。	实例数量配额达到限制，请联系管理员调整配额。
422	DBS.212019	The parameter cannot be processed.	请求中的参数或对象不能被正确识别。	请求参数错误，请检查参数合法性。

状态码	错误码	错误信息	描述	处理措施
500	DBS.108000	Server failure.	服务器错误。	服务内部错误，请联系客服。
500	DBS.108002	Server failure.	服务器错误。	服务内部错误，请联系客服。
500	DBS.108005	Server failure.	服务器错误。	服务内部错误，请联系客服。
500	DBS.200005	Server failure.	服务器错误。	服务内部错误，请联系客服。
500	DBS.200208	Server failure.	服务器错误。	服务内部错误，请联系客服。
500	DBS.200811	Failed to create the database.	创建数据库失败。	检查失败原因，可能是资源不足，请联系客服。
500	DBS.200821	Failed to modify database user permissions.	修改数据库用户权限失败。	可能是操作状态校验拦截，请重试。
500	DBS.213002	Failed to process the request.	请求处理失败。	服务内部错误，请联系客服。
500	DBS.213004	Failed to process the request.	请求处理失败。	服务内部错误，请联系客服。
500	DBS.290006	Failed to process the request.	请求处理失败。	服务内部错误，请联系客服。
500	DBS.290015	Failed to process the request.	请求处理失败。	服务内部错误，请联系客服。

7.4 获取项目 ID

操作场景

在调用接口的时候，部分URL中需要填入项目编号，所以需要获取到项目编号。有如下两种获取方式：

- [调用API获取项目ID](#)
- [从控制台获取项目ID](#)

调用 API 获取项目 ID

项目ID可以通过调用[查询指定条件下的项目信息](#)API获取。

获取项目ID的接口为“GET https://{Endpoint}/v3/projects”，其中{Endpoint}为IAM的终端节点，可以从[地区和终端节点](#)获取。接口的认证鉴权请参见[认证鉴权](#)。

响应示例如下，其中projects下的“id”即为项目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"
  }
}
```

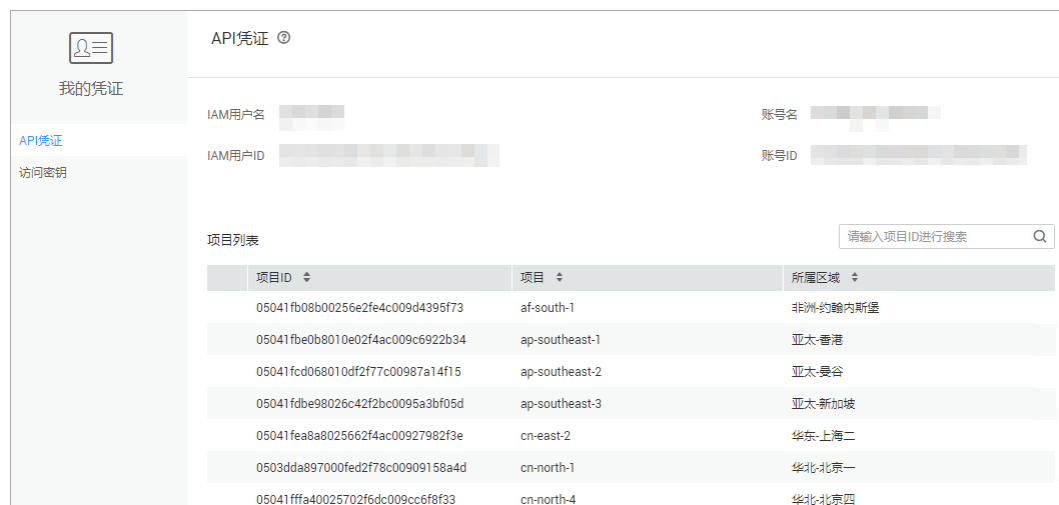
从控制台获取项目 ID

步骤1 注册并登录管理控制台。

步骤2 鼠标悬停在右上角的用户名，选择下拉列表中“我的凭证”。

在“API凭证”页面的项目列表中查看项目ID。

图 7-1 查看项目 ID



----结束

7.5 云数据库 TaurusDB 监控指标说明

功能说明

本节定义了云数据库TaurusDB上报云监控的监控指标的命名空间，监控指标列表和维度定义，用户可以通过云监控提供的API接口来检索云数据库TaurusDB产生的监控指标和告警信息。

命名空间

SYS.GAUSSDB

监控指标

表 7-3 监控指标说明

指标	指标名称	含义	取值范围	备注
gaussdb_mysql001_cpu_util	CPU使用率	该指标用于统计测量对象的CPU利用率。	0 ~ 100%	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql002_mem_util	内存使用率	该指标用于统计测量对象的内存利用率。	0 ~ 100%	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql004_bytes_in	网络输入吞吐量	该指标用于统计平均每秒从测量对象的所有网络适配器输入的流量。	≥0 Bytes/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql005_bytes_out	网络输出吞吐量	该指标用于统计平均每秒从测量对象的所有网络适配器输出的流量。	≥0 Bytes/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql006_conn_count	数据库总连接数	该指标用于统计连接到MySQL服务器的总连接数。	≥0 Connections	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql007_conn_active_count	当前活跃连接数	该指标用于统计当前活跃的连接数。	≥0 Connections	测量对象：数据库 监控实例类型：TaurusDB实例

指标	指标名称	含义	取值范围	备注
gaussdb_mysql008_qps	QPS	该指标用于统计SQL语句查询次数，包含DDL，DML，SHOW语句，SET语句和存储过程。	≥0 Times/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql009_tps	TPS	该指标用于统计平均每秒事务执行次数，包含提交的和回退的。	≥0 Times/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql010_innodb_buf_usage	缓冲池利用率	该指标用于统计使用的页与InnoDB缓存中数据页总数比例。	0 ~ 100%	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql011_innodb_buf_hit	缓冲池命中率	该指标用于统计该段时间读命中与读请求数比例。	0 ~ 100%	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql012_innodb_buf_dirty	缓冲池脏块率	该指标用于统计InnoDB缓存中脏数据与数据比例。	0 ~ 100%	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql013_innodb_reads	InnoDB读取吞吐量	该指标用于统计InnoDB平均每秒读字节数。	≥0 Bytes/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql014_innodb_writes	InnoDB写入吞吐量	该指标用于统计InnoDB平均每秒写字节数。	≥0 Bytes/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql017_innodb_log_write_req_count	InnoDB日志写请求频率	该指标用于统计平均每秒的日志写请求数。	≥0 Requests/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql020_temp_tbl_count	临时表数量	该指标用于统计MySQL执行语句时在硬盘上自动创建的临时表的数量。	≥0 Tables	测量对象：弹性云服务器 监控实例类型：TaurusDB实例

指标	指标名称	含义	取值范围	备注
gaussdb_mysql028_comdml_del_count	Delete语句执行频率	该指标用于统计平均每秒Delete语句执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql029_comdml_ins_count	Insert语句执行频率	该指标用于统计平均每秒Insert语句执行次数。	≥0 Statement s/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql030_comdml_ins_sel_count	Insert_Select语句执行频率	该指标用于统计平均每秒Insert_Select语句执行次数。	≥0 Statement s/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql031_comdml_rep_count	Replace语句执行频率	该指标用于统计平均每秒Replace语句执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql032_comdml_rep_sel_count	Replace_Selection语句执行频率	该指标用于统计平均每秒Replace_Selection语句执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql033_comdml_sel_count	Select语句执行频率	该指标用于统计平均每秒Select语句执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql034_comdml_upd_count	Update语句执行频率	该指标用于统计平均每秒Update语句执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql035_innodb_del_row_count	行删除速率	该指标用于统计平均每秒从InnoDB表删除的行数。	≥0 Rows/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql036_innodb_ins_row_count	行插入速率	该指标用于统计平均每秒向InnoDB表插入的行数。	≥0 Rows/s	测量对象：数据库 监控实例类型：TaurusDB实例

指标	指标名称	含义	取值范围	备注
gaussdb_mysql037_innodb_read_row_count	行读取速率	该指标用于统计平均每秒从InnoDB表读取的行数。	≥0 Rows/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql038_innodb_upd_row_count	行更新速率	该指标用于统计平均每秒向InnoDB表更新的行数。	≥0 Rows/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql048_disk_used_size	磁盘使用量	该指标用于统计测量对象的磁盘使用大小。	0GB ~ 128TB	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql072_conn_usage	连接数使用率	该指标用于统计当前已用的MySQL连接数占最大连接数的百分比。	0~100%	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql074_slow_queries	慢日志个数统计	该指标展示每分钟MySQL产生慢日志的数量。	≥0 Queries/min	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql077_replication_delay	数据同步延迟	该指标用于采集集群实例的数据同步延迟时间。	≥0 s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql104_dfv_write_delay	存储写时延	该指标用于统计某段时间写入数据到存储层的平均时延。	≥0 ms	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql105_dfv_read_delay	存储读时延	该指标用于统计某段时间从存储层读取数据的平均时延。	≥0 ms	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql106_innodb_row_lock_current_waits	InnoDB行锁数量	该指标用于采集InnoDB表上的操作当前正在等待的行锁数量。	≥0 Locks	测量对象：弹性云服务器 监控实例类型：TaurusDB实例

指标	指标名称	含义	取值范围	备注
gaussdb_mysql107_comdml_ins_and_ins_sel_count	Insert和Insert_Select语句执行频率	该指标用于统计平均每秒Insert和Insert_Select语句的执行次数。	≥0 Statement s/s	测量对象：弹性云服务器 监控实例类型：TaurusDB实例
gaussdb_mysql108_com_commit_count	Commit语句执行频率	该指标用于统计平均每秒Commit语句的执行次数。	≥0 Statement s/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql109_com_rollback_count	Rollback语句执行频率	该指标用于统计平均每秒Rollback语句的执行次数。	≥0 Statement s/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql110_innodb_bufpool_reads	InnoDB存储层读请求频率	该指标用于统计平均每秒InnoDB从存储层读取数据的请求次数。	≥0 Times/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql111_innodb_bufpool_read_requests	InnoDB读请求频率	该指标用于统计平均每秒InnoDB读取数据的请求次数。	≥0 Requests/s	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql114_innodb_bufpool_read_ahead	innodb顺序预读页数	该指标用于统计innodb顺序预读页数。	≥0 Pages	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql115_innodb_bufpool_read_ahead_evicted	innodb顺序预读，但未访问过的页数	该指标用于统计innodb顺序预读，但未访问过的页数。	≥0 Pages	测量对象：数据库 监控实例类型：TaurusDB实例
gaussdb_mysql116_innodb_bufpool_read_ahead_rnd	innodb随机预读页数	该指标用于统计innodb随机预读页数。	≥0 Read-aheads	测量对象：数据库 监控实例类型：TaurusDB实例

指标	指标名称	含义	取值范围	备注
gaussdb_mysql117_innodb_pages_read	innodb 读取物理page的数量	该指标用于统计innodb 读取物理page的数量。	≥0 Pages	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql118_innodb_pages_written	innodb 写入物理page的数量	该指标用于统计innodb 写入物理page的数量。	≥0 Pages	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql019_innodb_log_writes	innodb log buffer 写入log file的总次数	该指标用于统计对 InnoDB redo log文件的物理写入次数。	≥0 Writes	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql342_iostat_iops_write	IO写 IOPS	该指标用于采集磁盘每秒写次数。	≥0 Operation s/s	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql344_iostat_iops_read	IO读 IOPS	该指标用于采集磁盘每秒读次数。	≥0 Operation s/s	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql346_iostat_throughput_write	IO写带宽	该指标用于采集磁盘每秒写带宽。	≥0 Bytes/s	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql348_iostat_throughput_read	IO读带宽	该指标用于采集磁盘每秒读带宽。	≥0 Bytes/s	测量对象：数据库 监控实例类型： TaurusDB实例
gaussdb_mysql119_disk_usage_ratio	磁盘使用率	该指标用于统计磁盘的使用率。	0~100%	测量对象：数据库 监控实例类型： TaurusDB实例 1分钟
gaussdb_mysql371_taurus_binlog_total_file_counts	Binlog 文件个数	该指标用于统计 TaurusDB Binlog文件数量。	≥0	测量对象：数据库 监控实例类型： TaurusDB实例 5分钟

指标	指标名称	含义	取值范围	备注
gaussdb_mysql378_create_temp_tbl_per_min	临时表每分钟创建数	该指标用于统计 TaurusDB 执行语句时在硬盘上每分钟自动创建的临时表的数量。	≥ 0 Tables/min	测量对象：数据库 监控实例类型： TaurusDB 实例 1分钟

维度

Key	Value
gaussdb_mysql_instance_id	TaurusDB 实例 ID。
gaussdb_mysql_node_id	TaurusDB 实例下的节点 ID。